

| [NODIS Library](#) | [Program Management\(8000s\)](#) | [Search](#) |



NASA Procedural Requirements

COMPLIANCE IS MANDATORY FOR NASA EMPLOYEES

NPR 8800.15C

Effective Date: October 30,
2014

Expiration Date: April 17, 2024

[Printable Format \(PDF\)](#)

Subject: Real Estate Management Program w/Change 2, December 20, 2022

Responsible Office: Office of Strategic Infrastructure

| [TOC](#) | [ChangeHistory](#) | [Preface](#) | [Chapter1](#) | [Chapter2](#) | [Chapter3](#) | [Chapter4](#) | [Chapter5](#) |
[Chapter6](#) | [Chapter7](#) | [Chapter8](#) | [AppendixA](#) | [AppendixB](#) | [AppendixC](#) | [AppendixD](#) |
[AppendixE](#) | [AppendixF](#) | [AppendixG](#) | [ALL](#) |

Chapter 2. Physical Accountability Recording and Reporting

2.1 Overview

2.1.1 Chapter 2 defines the following:

- a. The general ledger accounts for reporting real property and the classification of real property into specific categories tied to the general ledger accounts.
- b. The criteria for capitalizing NASA real property and the various forms, including NASA Form 1046, used in communicating real property transfer, acceptance, status, and values.
- c. Coordination of records management and data with other NASA organizations.
- d. NASA requirements for developing and maintaining real property record files for each real property asset, including financial data and records.

2.2 Real Property Accountability

2.2.1 NASA Real Property Management System

2.2.1.1 The RPMS is the official NASA-wide electronic data system for maintaining and reporting real property. The data fields, codes, and procedures used in the RPMS conform to those required by this NPR. At the convenience and discretion of the RPAO, printed reports from the RPMS can be used instead of printed forms. Access to the RPMS and current information on its functionality can be obtained from FRED.

2.2.1.2 RPMS records are entered and stored in SAP, the Agency's enterprise resource management system, and may be accessed from both SAP and Business Objects (BOBJ). BOBJ is NASA's new reporting tool that was implemented in 2014 and provides flexible reporting functionality for RPMS and Mission Dependency Index (MDI) data.

2.2.1.3 The NASA property record card is equivalent to NASA Forms 845, 846, 846A, and 847. These forms are no longer required and can be generated in the RPMS. Paper copies of these forms are not required in the real property record files. This document will refer to these forms as the "NASA Property Record Card."

2.2.2 Establishment of Real Property Record Files

2.2.2.1 Every real property asset that is owned, leased, occupied, and/or controlled by NASA and can be classified as land, improvement to land, buildings, other structures and facilities, or leasehold improvements shall be entered into the RPMS in consultation with the Center DCFO (F). These classification categories are explained in Section 2.3. Real property record files shall be established for each new asset. This requirement is in accordance with

Executive Order 13327, and the \$5,000 acquisition value threshold no longer applies.

2.2.2.2 All additions and modifications to real property assets shall be entered into the RPMS in consultation with the Center DCFO (F).

2.2.2.3 The Facility Project Manager (FPM) and COR shall be responsible for delivering all documentation necessary for recording real property data in the RPMS to the Center RPAO for the following actions:

- a. Acquisition.
- b. Disposal.
- c. New construction.
- d. Addition, extension, or expansion of an existing facility.
- e. Alteration and modification.
- f. Demolition.

2.2.2.4 The following documents are examples that shall be available to support the changes in asset value or physical attributes due to the actions listed in Section 2.2.2.3:

- a. Final bid documents.
- b. Contract or other legal instrument (i.e., lease).
- c. Contract modifications or change orders.
- d. Signed acceptance document by NASA.
- e. Material inspection and receiving report.
- f. Invoices or other approved cost reports to support PP&E purchased and amount accumulated in work-in-progress (WIP) accounts.
- g. Transfer documents for transferred assets.
- h. Appraisal results for purchased and donated assets.

2.2.2.5 If the acquired real property asset includes a building with utilities and other structures serving the building, the building shall be entered as an individual asset in the RPMS. The other parts, which may include utilities, roads, sidewalks, and parking areas, will be entered under those classifications. The dividing line between the building and the other assets will be an imaginary 5-foot line outside of the building. This line defines the building's footprint, and the costs inside the 5-foot line are accountable to the building. The costs for the other parts should be accounted for in the appropriate classification.

2.2.2.6 NASA policies for recording real property records are based on the principles outlined by the Federal Accounting Standards Advisory Board (FASAB), as set forth in NPR 9250.1.

2.2.3 Maintenance of Real Property Record Files

2.2.3.1 All Centers shall maintain accurate, up-to-date records in the RPMS on all NASA-owned and controlled real property.

2.2.3.2 All signed paper copies shall be held by the RPAO in the record files and be scanned and stored in the RPMS asset records whenever possible.

2.2.3.3 Real property record files should be updated, with supporting documents, when the following events occur: acquisitions, new construction, alterations and modifications, land withdrawals, disposals, and change of use.

2.2.3.4 Centers shall record all in-grants of real property from either private sources or other governmental sources, including Federal property, in the RPMS. This applies to all in-grants, including leases, permits, licenses, agreements, or easements.

- a. If an in-grant is from another Federal agency, it shall be recorded as an in-grant rather than a transfer of ownership to avoid duplicate reporting to GSA in the FRPP and to the U.S. Treasury in financial statements.
- b. NASA-funded improvements that meet the capitalization criteria, as set forth in NPR 9250.1, and are made to in-granted real property shall be recorded as leasehold improvements, in accordance with Section 2.2.13.3.

2.2.3.5 The RPAO shall annotate and document real property records in all cases involving out-grants for the use of

NASA property by other parties. Real property so granted will, during the term of the grant, be considered part of the NASA-owned real property and will be recorded in the RPMS as such.

2.2.3.6 The RPAO shall annotate and document real property records in all cases involving transfer of responsibility for part or all of a facility, whether by contract, lease, Space Act Agreement (SAA), or other means, to contractors or other non-Federal parties where the term of the transfer is for one year or longer.

2.2.4 Disposals

2.2.4.1 All real property disposals, including demolition, Federal transfer, sale, public benefit conveyance, lease termination or expiration, or other means, shall be fully documented. See Chapter 7 for guidance on disposals. Examples of required supporting documentation are in the NASA Real Estate Desktop Guide.

2.2.4.2 The Center DCFO (F) shall be notified when the decision is made to dispose of real property and again no later than 15 days after the disposition.

2.2.5 Coordination of Records within NASA

2.2.5.1 The Center DCFO and the RPAO shall maintain close coordination to ensure that records for capitalized real property assets can be validated. Pursuant to NPR 9250.1, recorded balances for capitalized real property are to be reconciled with the financial accounts on a quarterly basis, or more frequently if required.

2.2.5.2 The Facility Construction Office and the RPAO shall maintain close coordination and establish processes to ensure that the real property records are up to date and accurately maintained in accordance with NPR 1441.1.

a. The RPAO shall maintain maps, plans, drawings, specifications, and other documents in the real property record files as supporting documentation for internal and external reviews of real property records.

2.2.5.3 Coordination shall be maintained between the FPM, the COR, the RPAO, and the Financial Management Office (FMO) or Fiscal Officer (FO) to ensure that the required documentation is provided, so that the respective record balances for capitalized real property are in agreement. NPR 9250.1 prescribes the criteria and procedures for closing facility project costs to the fixed asset general ledger accounts.

2.2.6 Accounting Coordination for Construction Projects

2.2.6.1 Center DCFO, in consultation with the RPAO, shall identify costs to be capitalized and maintain financial records for each capital facility project in progress.

a. Center DCFO and the RPAO shall provide support and guidance to the FPM in completing NASA Form 1739, Capitalization Determination Form for all facility projects. JPL (an FFRDC) will use the equivalent form authorized by the NASA OCFO.

b. All costs incurred to acquire a real property asset and bring it to a state suitable for its intended use shall be provided to the RPAO for recording in the RPMS.

c. When construction of a real property asset is completed, the total cost of the item is transferred from the work-in-progress account to the appropriate financial class code. This addition shall be made at the time of beneficial occupancy, physical or financial completion, or when title is vested in NASA, whichever occurs first when meeting capitalization guidelines. See Section 2.2.10 for more information.

2.2.7 Recording Real Property Expenditures

2.2.7.1 Each real property acquisition, addition, improvement, alteration, rehabilitation, or replacement shall be treated as a single event.

2.2.7.2 The RPAO shall:

a. Record all costs incurred in relation to the event in the applicable financial class code, which is different from the real property classification code.

(1) Use the total cost of each event to determine whether it meets the capitalization criteria in NPR 9250.1.

(2) Determine whether or not individual sections or additions of new construction or modifications to existing real property that do not meet the capitalization criteria may be part of a larger capitalized asset.

2.2.8 General Ledger Accounts

2.2.8.1 The RPAO shall consult with the Center DCFO property accountant to ensure the appropriate general ledger account is used.

2.2.8.2 Other general ledger accounts may be used for special circumstances. Both the general ledger account and the classification stay with the asset throughout its life unless the use of the asset changes by more than 50 percent from its original use.

2.2.9 Paper Records and Forms

2.2.9.1 The following forms are not part of the RPMS but shall be used when appropriate:

- a. NASA Form 1046, Notification of NASA Real Property Transaction, Including Transfer Between Agencies.
- b. Department of Defense (DoD) DD Form 1354 Transfer and Acceptance of DOD Real Property.

2.2.9.2 NASA Form 1046 shall be used for documenting transfers of real property:

- a. Into and out of NASA (other than DoD).
- b. Between NASA Centers.
- c. Between NASA and other Government agencies (other than DoD).
- d. In transactions with contractors.

2.2.9.3 DD Form 1354 shall be used for documenting transfers of real property, including acquisitions, improvements, disposals, and collateral equipment between NASA and DoD.

2.2.9.4 Signed copies of NASA Form 1046 and DD Form 1354 shall be held by the Center RPAO in the Real Property Record Files and copies forwarded to the Center DCFO (F).

2.2.10 NASA Form 1046 Notification Process

2.2.10.1 Within 30 calendar days of transfer of title to NASA or acceptance of real property by the Contracting Officer (CO), as described in Section 2.2.10.3, whichever occurs first, the FPM or other designated NASA representative responsible for monitoring the acquisition or improvement shall complete and forward NASA Form 1046 to the RPAO. Instructions for completing NASA Form 1046 are found in Appendix A of the NASA Facility Classification Guide.

2.2.10.2 The transfer of title to new construction, capital improvements, and the like will be considered to have been passed to NASA when an authorized NASA representative has done both of the following:

- a. Certified in writing that all required contracted improvements have been accepted.
- b. Approved all related invoices for payment.

2.2.10.3 There are three types of acceptance on NASA Form 1046:

- a. Financial Completion gives complete ownership to NASA and custody of the property to the Center accepting the transfer. Financial Completion is to be used when the facility is complete and all bills have been paid.
- b. Physical Completion differs from Financial Completion and is subject to any conditions stated on NASA Form 1046 or DD Form 1354. Physical Completion is used when final payment has not been completed.
- c. Beneficial Occupancy is granted when facilities are used by NASA, in whole or in part, before they have been fully completed, which may be due to either:

- (1) Disagreement on the existence of or need for correction of deficiencies.
- (2) Lack of completion of system testing or checkout.

2.2.10.4 If initial acceptance is Physical Completion or Beneficial Occupancy, the RPAO shall update the property record with an annotation of the property value within 30 calendar days after Financial Completion has occurred.

2.2.11 NASA Form 1046 Verification Process

2.2.11.1 The FPM is responsible for preparing NASA Form 1046. The FPM shall:

- a. Research and verify all project costs to determine the total dollar value for the record.
- b. Work with the CO for review of and concurrence on NASA Form 1046.
- c. Forward the verified NASA Form 1046 to the RPAO.

2.2.11.2 The RPAO shall review, validate, and make necessary corrections to the data submitted by the CO and

FPM on NASA Form 1046. The RPAO will update the RPMS accordingly and submit NASA Form 1046 to the Center DCFO (F).

2.2.11.3 The RPAO shall notify the FUO to ensure that any facility utilization updates are reflected in the RPMS.

2.2.11.4 The Center DCFO (F) shall reconcile the RPMS increase or decrease reflected on the NASA Form 1046.

2.2.11.5 In cases of acquisition or modification involving the U.S. Army Corps of Engineers, the Naval Facilities Engineering Command, and other DoD affiliates, the FPM or another NASA representative responsible for monitoring the event shall, prior to recommending acceptance by NASA, ensure that the data provided on the DD Form 1354 meets Center requirements. The RPAO will retain the signed copy of the DD Form 1354 in the Real Property Record Files.

2.2.12 Property Value in RPMS

2.2.12.1 Real property costs for construction and modifications, including removal of collateral equipment, shall be recorded in the RPMS on the Property Value Tab.

2.2.12.2 The RPAO shall enter all transactions for existing real property in the RPMS on the Property Value Tab. If the cost is less than the capitalization threshold, the Center DCFO(F) will determine whether the transaction is a capital expenditure. If the transaction meets the criteria listed in Section 2.3.3.2, it is entered as a capital transaction.

2.2.12.3 The RPAO shall enter a single event of construction or improvement at its full cost, including costs listed in Section 2.3.3.

2.2.12.4 Costs for acquisition of land shall be entered in the RPMS on the Property Value Tab that is dedicated to the land acquisition.

2.2.13 Improvements and Repairs

2.2.13.1 Upon termination of an out-grant agreement for a NASA-owned facility, the agreement needs to specify how any improvements made by the tenant will be handled and whether NASA will take ownership of those improvements along with the return of the asset. The provisions of Section 2.2.12 apply when recording such improvements in the RPMS. Section 6.8 also applies.

2.2.13.2 The costs for repair projects are not generally capitalized unless a project extends the useful life of a facility. This determination is made by the FPM and the Center DCFO (F). If repair project costs will be capitalized, this shall be reported to the RPAO. Otherwise, costs associated with repair projects should not be added to the RPMS but, rather, accounted for as an expense.

2.2.13.3 Improvements made by NASA to in-granted assets shall be entered as leasehold improvements in the RPMS on the Property Value Tab.

2.2.14 NASA Form 1509: Planning for Real Property Projects

2.2.14.1 To plan capital budgets effectively, proposed construction projects will be managed in the NASA accounting process as follows:

a. In accordance with NPR 8820.2, proposed construction projects shall be submitted at their inception to the OCFO, the RPAO, and the CMO.

b. The FPM shall notify the Center DCFO (F) and the RPAO of proposed projects during the Planning, Programming, Budgeting, and Execution (PPBE) submission period to ensure accuracy, completeness, and timeliness of real property information.

c. Proposed capital improvement projects are supported by NASA Form 1509, Facility Project Brief Project Document. It is generally the FPM's responsibility to prepare the form, which is used when projected costs are \$1 million or greater. Requirements and processes for NASA Form 1509 are detailed in NPR 8820.2.

d. The FPM, in consultation with the RPAO and the Center DCFO (F), shall submit a NASA Form 1739, in accordance with NPR 9250.1.

2.2.14.2 The RPAO shall meet with the Center DCFO (F) and FPM during the NASA Form 1509 process and pre-project planning to ensure coordination of the project information.

2.2.14.3 The RPAO and the Center DCFO (F) should attend the FURB and other project-planning meetings. See Section 5.3.3 for more information.

2.3 Real Property Metrics

2.3.1 Classification

2.3.1.1 For purposes of general classification, NASA real property assets shall be classified according to the following five categories, which are consistent with the FRPC Real Property Inventory Reporting guidance and the NASA Financial Accounting System. For specific guidance on classifying land and capitalizing cost, refer to NPR 9250.1.

- a. Land. This includes all property acquired on a fee-simple basis, including mineral and water rights.
- b. Improvements to Land. This includes nonpermanent, depreciable improvements to land used in general operations, as well as landscaping and earthwork.
- c. Buildings. This includes buildings and improvements to buildings, as well as all equipment that is built in, affixed to, or installed in such a manner that the installation cost, including special foundations or unique utilities for services, or the facility restoration cost after removal, is substantial.
- d. Other Structures and Facilities. This includes construction and improvements of structures and facilities, such as airfield pavements, harbor and port facilities, power production facilities and distribution systems, research and development facilities other than buildings, roads, and bridges. This classification also includes structures that are not completely enclosed, like picnic shelters, pavilions, and covered storage areas. Built-in equipment installed in such a manner that the installation cost, including special foundations, unique utilities or services, or the facility restoration cost after removal is substantial is also included in this category.
- e. Leasehold Improvements. This includes improvements made by or on behalf of NASA to in-granted land, buildings, other facilities, easements, and rights-of-way.

2.3.2 NASA Facility Classification Codes

2.3.2.1 The NASA Facility Classification Coding System is a hierarchical scheme of real property types and functions that serves as the framework for identifying, categorizing, and analyzing NASA's inventory of land and facilities around the world. The primary intent of the system is to classify facilities according to the function they serve, as opposed to the process they support.

2.3.2.2 The NASA Real Property Classification Guide provides details of the coding system and cross-references to the GSA usage codes and to NASA general ledger accounts.

2.3.3 Capitalization

2.3.3.1 In real property accounting, it is crucial to distinguish capital expenses from ordinary operating expenses. Capital expenses, such as expenditures for land, buildings, and improvements, can be defined generally as those that add value to or improve the functional capacity of an asset. In contrast, operating expenses, such as routine maintenance, cleaning, and repairs, do not add value to the asset. Procedures for recording new assets or modifying existing asset records can be found in Section 2.2 of this NPR.

2.3.3.2 NASA shall capitalize individual items of Property, Plant, and Equipment (PP&E), including real property, that meet all of the criteria identified in NPR 9250.1.

2.3.3.3 NASA shall capitalize improvements and modifications to existing real property that meet all of the criteria identified in NPR 9250.1.

2.3.3.4 Examples of qualifying costs are in the NASA Real Estate Desktop Guide.

2.3.3.5 Accounting for certain events may require capitalizing costs of one or more components. RPAOs, in consultation with the Center DCFO (F), shall determine whether component costs should be capitalized separately or as an aggregated sum.

- a. If an item as originally installed is an aggregate of components that can stand alone and are severable, the component costs shall be evaluated individually against the capitalization criteria. Only component costs that meet all of the criteria are to be capitalized.
- b. If an item as originally installed is an aggregate of components that cannot stand alone and are not severable, the aggregate sum of the components shall be evaluated against the capitalization criteria. Only aggregate costs of items that meet all the criteria are to be capitalized.
- c. Individual sections or additions of new construction or improvements to existing real property for which individual costs are less than the threshold identified in NPR 9250.1 may need to be capitalized if those sections or additions meet capitalization requirements as sections or additions that are part of a larger capitalized asset.

2.3.3.6 The cost of facilities constructed by or through foreign governments or in foreign countries under NASA contracts shall be capitalized in accordance with the title rights contained in formal agreements.

2.3.4 Book Value

2.3.4.1 The book value of a property is the original cost of the property plus capital improvements, modifications, removals, or other related actions. The book value used in this NPR and in the RPMS is different from the financial book value used by the OCFO. Qualifying modifications may include those made to land and buildings, and the installation or removal of post-construction collateral equipment. Only book values that meet capitalization requirements of NPR 9250.1 are carried forward into NASA financial records.

2.3.4.2 In an effort to avoid over-inflation of book value, improvements, modifications, or other actions that cause increases or decreases in book value also require an offset in the current book value of the real property. This offset is based on the value of the real property that is replaced in the improvement, modification or removal action, and the original construction date of that real property. This value determination may require sophisticated mathematical calculations and shall be made by the FPM in consultation with the DCFO (F) and RPAO.

2.3.5 Current Replacement Value

2.3.5.1 The current replacement value (CRV) of a facility is the total escalated value of the original cost in present-day dollars. CRV is the book value of the asset as escalated by the Building Cost Index (BCI) found in the [Engineering News-Record](#), a McGraw Hill publication. CRV is not an estimated cost to rebuild or replace the facility. BCI is based on an average of labor and construction costs in 20 cities and is updated annually in January.

2.3.5.2 CRV is used as a measure of the present value of all NASA-owned real property. Thus, CRV is required for all NASA-owned real property regardless of current status or utilization level, including real property that is out-granted to other entities.

2.3.5.3 The Real Property Management System (RPMS), described in Section 2.2.1, will automatically calculate CRV for all NASA-owned assets based on the book value of the asset and the year the asset was constructed. CRV will be recalculated in the RPMS on an annual basis following the end of each fiscal year and after the BCI is published each January.

2.3.5.4 Real property assets that do not require a CRV are those that are acquired by NASA for temporary use but are not owned by NASA. Examples include assets acquired by lease or other use agreement.

2.3.6 Mission Dependency Index

2.3.6.1 NASA employs the Mission Dependency Index (MDI) as a measure of the relative importance of a real property asset and the difficulty in replacing its functional capacity in the view of the manager(s) of the activities associated with the asset. It is built upon the concept that the organization which occupies (has custody of) an asset is best able to assess the importance of the facility to its requirements, as defined in the organization's functional statement, and its current and projected programs and projects. MDI is a tool for efficient mission-based execution of institutional facilities management, project prioritization decision-making for Construction of Facilities, physical vulnerability assessments, maintenance and operation, and potential divestiture target identification.

2.3.6.2 The MDI scale is built upon responses to two fundamental questions:

- a. How long a facility can be out of service before the user's ability to perform its mission is adversely impacted; and
- b. How difficult or costly it is to relocate the services or replace or repair this facility should it become unusable.

2.3.6.3 NASA implements MDI within the RPMS based upon the organization code, which is monitored and assessed at the Center Directorate organizational level. Centers shall assess all buildings and other structures with a current status of active, standby, or mothballed at least once every three years.

- a. Verification of MDI assessments shall be performed as part of the Center's physical inventory. Reassessments shall be triggered by construction projects, organizational moves, and/or significant program changes.
- b. The MDI portal and instructions for using the tool can be found on NASA's bReady Enterprise Portal.

2.3.6.4 Center Directors shall ensure that Center Operations Directorates complete the MDI, in accordance with the requirements.

2.4 Central Repository for Real Property Documents

2.4.1 FRED is the central NASA office for keeping documents regarding acquisition and disposal of land. FRED does not keep records of new construction or modifications on NASA-controlled properties. Documents on file with FRED

include:

- a. Preliminary and final title opinions (and related papers) of the Attorney General of the United States.
- b. Deeds.
- c. Foreign acquisitions and disposals.
- d. Federal land withdrawals for NASA use.
- e. Reports of excess to GSA.

2.4.2 Centers shall record real property land acquisitions and disposals with the local County Recorder's Office, keep the original recorded documents, and provide electronic copies to FRED.

2.5 Physical Inventory

2.5.1 In accordance with OMB, each Center shall complete a physical inventory by visual inspection of all Center-managed real property at least every three years to ensure that each asset exists as described and is recorded accurately.

- a. At the completion of each inventory, Center real property assets shall be updated in the RPMS by the RPAO.
- b. This update shall include entering the inventory date.

2.5.2 A physical inventory also shall be completed when a NASA Form 1046 is submitted to the RPAO due to major renovations, new construction, and other related projects.

2.5.3 The RPAO shall determine when there are additional conditions or actions that may warrant a physical inventory.

[| TOC |](#) [ChangeHistory](#) | [Preface](#) | [Chapter1](#) | [Chapter2](#) | [Chapter3](#) | [Chapter4](#) | [Chapter5](#) | [Chapter6](#) | [Chapter7](#) | [Chapter8](#) | [AppendixA](#) | [AppendixB](#) | [AppendixC](#) | [AppendixD](#) | [AppendixE](#) | [AppendixF](#) | [AppendixG](#) | [ALL](#) |

[| NODIS Library](#) | [Program Management\(8000s\)](#) | [Search](#) |

DISTRIBUTION: **NODIS**

This document does not bind the public, except as authorized by law or as incorporated into a contract. This document is uncontrolled when printed. Check the NASA Online Directives Information System (NODIS) Library to verify that this is the correct version before use: <https://nodis3.gsfc.nasa.gov>.
