REAL PROPERTY INVENTORY REQUIREMENTS

Installations & Environment

Business Transformation Directorate

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Executive Summary

> "The war on terrorism does not supplant the need to transform DoD; instead, we must accelerate our organizational, operational, business, and process reforms."
>
> Donald Rumsfeld, Secretary of Defense

As one element of a larger Department-wide initiative to improve the integration of financial management and business operations, the Department of Defense is working to advance the reliability, accuracy, and timeliness of its real property information environment and inventory reporting systems. Through standardized data elements and processes, this initiative is expected to reduce redundancy and other inefficiencies, address material weaknesses, and enhance asset accountability.

The Department's real property inventory systems today are much better than they were five years ago. However, a review of the current environment (Section 2) reveals that more can be done. The "As-Is" environment still includes some incompatible, inaccessible, inaccurate, and incomplete data, which can produce wasted resources, inconsistent analysis, and flawed decisions. In short, the existing environment does not meet the Department's current and forecasted requirements.

To better define a "To-Be" information environment, the Department conducted a business process reengineering of the real property inventory process. This effort concentrated on the information needed to describe the physical, legal, and financial characteristics of property. It produced a common business process model for the real property inventory, standard data elements and data definitions, data business rules, and recommendations for policy changes. Results are described in Section 3 of this report and detailed in Attachments A and B, with core data elements and their characteristics defined in Attachment D.

To guide the way forward, three strategic goals are identified:

- **Improve awareness**: Inform real property professionals of the importance of accurate inventories to support planning and programming for future requirements.
- **Enhance access**: Provide all potential Defense users real-time access to standardized real property information.
- **Optimize resources**: Ensure that resources currently used to transfer and transform data are enhanced or reduced and redirected to improve maintenance and accessibility of data.

Although estimates of cost, staffing, timing, or phasing are outside the scope of this report, specific follow-on, near term tasks are identified. The tasks involve new and updated directives, a cost analysis of alternatives, transition planning, and testing.

The initiative directly supports the President's Management Agenda and the government-wide requirements currently emerging from the Federal Real Property Council. This initiative is also a key objective in the Defense Installations Strategic Plan, and supports several other objectives.

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1.   Introduction

> *"The war on terrorism does not supplant the need to transform DoD; instead, we must accelerate our organizational, operational, business, and process reforms."*
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> *Donald Rumsfeld, Secretary of Defense*

As an element of his plan to transform the Department of Defense and reform Defense business processes, the Secretary of Defense established the Business Management Modernization Program (BMMP). The BMMP provides policy direction and oversight for five business domains:

- Acquisition
- Financial Management
- Human Resource Management
- Installations and Environment
- Logistics

For the Installations and Environment Domain (I&E Domain), the Deputy Undersecretary of Defense (Installations and Environment) – DUSD(I&E) – is the domain owner, with responsibility for all business areas associated with the Defense Installations and Environment Community (I&E Community).

One such business area concerns real property assets. The Department holds legal interests in approximately 30 million acres of land and 600,000 facilities (buildings and structures) worldwide, the scope and variety of which are unmatched by any other government or private enterprise entity. The plant replacement value of this inventory is about $650 billion. The funds needed to operate, sustain, and recapitalize these assets exceed $25 billion each year.

Real property assets are essential to the preparation for and successful accomplishment of most Defense missions. Hence, accurate and timely real property asset data is fundamental to effective management of the assets, and ultimately to military success. Real property asset data links accountability, regulatory compliance, resource requirements, and decision support. Access to the data is essential across the Defense enterprise, at all levels.

1.1.   Purpose

The primary purpose of this report is to describe a real property inventory that will meet the Department's future requirements. The real property accountability function for Defense should meet the following requirements:

- Achieve total asset accountability
- Provide useful data for local real property management
- Provide reliable and timely data and information to higher headquarters for reporting and decision making

- Ensure accessibility to current data to all relevant users
- Eliminate duplication
- Establish and enforce real property data standards department-wide to facilitate data integration and analyses

An earlier study, *Assessment of DoD Real Property Information Systems*[1] summarized the current state of real property inventory information systems this way:

"DoD's real property information systems, including planned improvements, do not meet DoD's current and projected analytic and reporting requirements. Defense real property inventory data is:

- Incompatible across the Defense components
- Inaccessible to key users
- Inaccurate and incomplete, necessitating application of complex and inefficient business rules to use the data.

These shortcomings result in:

- Wasted money as analysts expend excessive resources to produce and obtain usable information
- Inconsistent analyses that undermine credibility inside and outside the Department
- Flawed decisions, based on poor information, producing unintended consequences."

With a clearly articulated need to improve the Department's real property inventory, the DUSD(I&E), in conjunction with the BMMP, initiated the Real Property Inventory (RPI) initiative. This initiative, which addresses the foundation for installations and environment business management activities and decision making, is aligned with and supports the Defense Installations Strategic Plan, the BMMP mission, emerging Federal Real Property Council requirements, and the President's Management Agenda.

1.2.   Scope

Because the focus is on real property asset accountability, this reengineering report concentrated on the information needed to describe the physical, legal, and financial characteristics of real property. Functional areas such as leasing, network facilities (e.g., utilities), and attributes needed to enable space management were also addressed to improve the overall real property accountability of the Department A robust analysis of financial management was conducted to address accountability and financial material weaknesses. This report also recommends several policy changes that will help enable realization of the "To-Be" environment.

This report does not include all the information needed for real property management (real property planning, space management, sustainment, etc.)–however, the recommendations

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[1]*Assessment of DoD Real Property Information Systems*, Office of the Deputy Under Secretary of Defense for Installations and Environment, August 8, 2001, p. 3.

address inventory processes and data that can be directly tied to real property management systems. When operational, this information environment will help improve overall real property management.

This report does not describe cost, staffing, timing, or phasing for implementing the real property inventory requirements. The following steps must be taken to complete the functional analysis:

- Develop a new Draft DoD Instruction (DoDI) for RPI and forecasting,
- Revise the DoD Financial Management Regulation to include recommendations from the Accounting Work Group,
- Conduct an Analysis of Alternatives to factor in existing capabilities and the cost of modifications,
- Develop a transition plan for real property inventorying across DoD, and
- Create a Real Property Site Unique Identifier registry to conduct a proof-of-concept.

The outcomes identified in this report may change as other I&E Domain competencies pass through the BPR process. Efforts at the enterprise level could also have an impact.

1.3.   Goals

To guide the way forward, three strategic goals are identified:

- **Improve awareness**: Inform real property professionals of the importance of accurate inventories to support planning and programming for future requirements.
- **Enhance access**: Provide all potential Defense users real-time access to standardized real property information.
- **Optimize resources**: Ensure that resources currently used to transfer and transform data are enhanced or reduced and redirected to improve maintenance and accessibility of data.

This report stresses the use of business requirements instead of regulatory compliance to drive change and improve real property accountability.

2.   The Current Environment

With each passing year, more functional communities and Defense Components find it necessary to access real property data. Until the 1980s, this data primarily supported the base engineering community–charged with property accountability and facilities maintenance–and major commands responsible for stationing units and organizations, and providing adequate facilities. In the late 1980s, the need to use real property inventory data significantly increased with the emergence of new missions for environmental compliance, clean up, pollution prevention, and conservation and preservation, and with the initiation of a series of four rounds of Base Realignment and Closure (BRAC). The Chief Financial Officers Act of 1990 and the financial accounting requirements established for Defense revolving funds required DoD to formally capitalize and depreciate real property assets. Several years later, Defense leaders began demanding that budget requirements for facilities programs be developed based on a unit cost approach that uses actual inventory. This trend continues, with the current Defense-wide effort to document all training ranges and their uses with geo-spatial data. In addition, Congress has been requesting increasingly detailed information about Defense real property.

It is apparent that the demands placed on real property information will continue to expand. Federal government and Defense audit activities have increased their scrutiny of real property records. Most audits and reviews find significant shortcomings with the information. The increased attention has coincided with a significant reduction in Defense resources and staffs, especially at the installation level. During the past decade of declining budgets, the Services' priorities have centered on modernizing weapon systems, leaving real property programs relatively under funded across DoD. Consequently, at the local level, budget cuts have led to a significant reduction in real property management staff with some managers de-emphasizing the maintenance of accurate, up-to-date real property records.

Today, the RPI transactional data for the DoD resides in the inventory systems of the three Military Departments (Army, Navy, and Air Force) and Washington Headquarters Services (WHS). At the end of the fiscal year (September 30th), each Military Department provides a copy of its data to the Office of the Secretary of Defense (OSD) to update the Facilities Assessments Database (FAD). Because a lack of standardized data elements among the Services' native databases still exists, business rules have been developed to normalize the data before inclusion in the FAD. The data is validated each year and anomalies are reported to the respective service for correction. Data from the FAD is used to populate a variety of real property resourcing predictive models and is used by OSD for real property analysis. The data resides on a server within OSD and is available to installations and facilities analysts through a graphic user interface.

The development process for the current FAD is an example of one of the barriers that must be overcome before data can be consolidated to a single data store. Standardized elements, definitions, business rules, and processes as recommended by this document are necessary. The data emanating from the services and agencies of the DoD must be collected at a consistent point in the business process, mean the same thing to all parties, and be of value to all levels of the organization. Such consistency would make data stores or warehouses such as the FAD more useful.

2.1.   Regulatory Requirements

U.S. law and DoD regulations and instructions establish real property accountability and financial reporting requirements.

2.1.1   Real Property Accountability

10 United States Code (USC) 2721 directs OSD to maintain records of fixed property and installations on both a quantitative and a monetary basis. 10 USC 2682 places all real property facilities under the jurisdiction of DoD and used by a DoD activity or agency (other than the Military Departments) under the authority of one of the Military Departments. 10 USC 2674 places the Pentagon Reservation under the control of OSD. WHS operates the Pentagon Reservation and maintains leases in the National Capital Region. Hence, all Defense real property accountability records (excluding civil works) are maintained by the three Military Departments and by WHS.

DoD has implemented the regulatory inventory requirements via Department of Defense Instruction (DoDI) 4165.14, *Inventory of Military Real Property*. This instruction does not contain policy and procedures for real property accountability and for meeting DoD's immediate financial, programming, and budgeting requirements.   A new DoDI that establishes revised policy will be developed, with procedures based on the real property business re-engineering documented in this report.

Volume 4, Chapter 6, DoD 7000.14-R, *Financial Management Regulation* (FMR), establishes requirements for physical inventories for Property, Plant, and Equipment (PP&E) and requires DoD Components to inventory general real property at least every 5 years. Real property Heritage Assets must be inventoried at least every 3 years. Physical inventories should ensure that real property is:

- At the location identified in the property accountability records or system,
- As described in the property records, and
- In the condition described in the property records.

2.1.2   Financial Reporting and Statement Requirements

In addition to real property accountability, DoD is also required to capitalize and depreciate its real property holdings. 31 USC 3515 requires each executive agency designated by the President to prepare and submit financial statements to the Director of the Office of Management and Budget by 31 March following each fiscal year. 31 USC 3521 further requires the DoD Inspector General to perform an audit of DoD's financial statement prior to submission to the Comptroller General.

Volume 4, Chapter 6, DoD FMR details DoD accounting standards and policies to meet its financial statement reporting requirements for PP&E. General PP&E consists of tangible assets that have an estimated useful life of 2 years or more; are not intended for sale in the ordinary course of operations; are acquired or constructed with the intention of being used or made available for use by an entity; and have an initial acquisition cost, book value or, when

applicable, an estimated fair market value that equals or exceeds the current DoD capitalization threshold of $100,000. General PP&E also includes:

- Assets acquired through capital leases, including leasehold improvements;
- Property owned by the reporting entity even though it may be in the possession of others (e.g., state and local governments, colleges and universities, or contractors);
- Land, other than Stewardship Land[2], with an identifiable cost that was specifically acquired for, or connected with, the construction of General PP&E; and
- Land rights (interests and privileges held by an entity on land owned by others) such as leaseholds, easements, water and power rights, diversion rights, submersion rights, rights-of-way, and similar land interests.

Land rights are designated as financially accountable real property. Current real property databases include, on a consistent basis, only owned real property. Some leased real property is included, but not consistently. The new DoDI will direct the inclusion of all land rights.

Volume 4, Chapter 6, DoD FMR also provides rules for financial accounting responsibility for real property. As noted above, Defense real properties owned by DoD are accounted for by the three Military Departments and WHS; however, ownership alone does not determine financial accountability. For example, the FMR states, "DoD Components shall only report predominately used General PP&E assets owned by other DoD Components when the cost of those assets, taken as a whole, are material to the predominant user Component's financial statements."   Office of the Undersecretary of Defense, Comptroller plans to rescind the "preponderant use" policy in the next version of the FMR. The following examples illustrate how the current policy is implemented.

- **Military Departments – General Fund**. If the Air Force is a tenant on an Army installation and the Air Force is the preponderant user of a building on that installation, the Army should report the building on its financial statements–not the Air Force. This policy recognizes that the Military Departments routinely use each other's facilities in the normal course of their missions and that the net effect of this "cross use" is not material to their financial statements.
- **Defense Agencies – General Fund**.   Defense Agencies that produce financial statements and/or are included in DoD Consolidated Financial Statements generally must recognize and report the facilities used in their operations. Most facilities used by the Defense Agencies are owned by, or titled to, the Military Departments; however, these facilities are material to the performance of the Defense Agencies' missions. As such, these facilities are also material to the Defense Agencies' financial statements, shall be reported on these statements, and excluded from the financial statements of the Military Departments.
- **Working Capital Funds (WCF)**.   When a WCF activity is the preponderant user of a facility, that activity shall report and depreciate the facility on its annual financial statements. This requirement exists without regard to whether the activity belongs to a

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[2] Stewardship Land is land and land rights owned by the Federal Government but not acquired for or in connection with items of general PP&E.

Component. When a WCF activity is <u>not</u> the preponderant user but funds capital improvements, the WCF activity shall report and depreciate such improvements on their annual financial statements.

- **Medical Facilities and Equipment**. The preponderant use policy outlined above does not apply to medical facilities and equipment. These facilities serve the personnel and families working at, or living near, military installations. Therefore, the military installation is the preponderant user of the medical facility. All medical General PP&E equipment and facilities shall be reported on the annual general fund financial statements of the Military Department that owns the nearby installation.

Defense Agencies have always needed to track and account for the facilities they use to monitor their Interservice Support Agreements (ISSAs), manage their space, and track the real property projects they fund. DoD's financial accounting responsibilities have intensified the need for all Defense Agencies to track and account for their use of facilities to prepare their financial statements. In effect, each Defense Agency now has a vested interest in the accuracy of the Military Department's real property records and has become a "customer" for real property information. Unfortunately, Defense Agencies do not have direct access to the Military Departments' real property inventory databases, nor is there a formal reconciliation process that allows a Defense Agency to resolve a discrepancy between the Military Department's real property inventory data and the Defense Agency's internal records.

The DoD FMR specifies that depreciation expenses shall be calculated and accumulated using the straight-line method based on the recorded cost less the salvage value, and divided equally among accounting periods during the asset's useful life.

Finally, DoD FMR also requires that deferred maintenance amounts be reported on annual financial statements for General PP&E real property that have a cost that equals or exceeds the DoD $100,000 capitalization threshold. To calculate deferred maintenance, federal-wide accounting standards permit the use of Cost Assessment Surveys or Life Cycle Cost Forecasts.

2.2.   Requirements Determination for Programming and Budgeting

Up to this point, the focus has been primarily on legally driven regulatory requirements: accountability and financial reporting. The emphasis now shifts to uses for real property data that is driven by DoD operational needs. It is evident that analysts across DoD need to be able to turn data into information that provides for informed decision-making. Examples of questions include:

- What facilities are in my congressional district/state and what is their value?
- What is the projected (value of) facility inventory through the Program Objective Memorandum (POM) years?
- Where are there excess facilities?
- How old is the physical plant (by category, by organization)?
- In what condition is the physical plant (by category, by organization)?
- Who are the owners or users and for what purpose is the plant used?
- What is the percentage of leased properties to the total inventory?
- What is the average age of the current set of facilities?

- How long can the current facilities last?
- Is the remaining useful life of the inventory increasing or decreasing?
- What investment is required to "hold the line" on aging or lower it by a specified percentage?
- What is the age profile of a selected facility type or investment category?

One of the primary functions of the Service headquarters and OSD is to develop and justify Defense programs and budgets to obtain the resources required to equip and sustain the military forces. Adequate facilities are absolutely essential to Defense; however, facility restoration, modernization, and sustainment are often relatively low program and budget priorities compared with modernizing and sustaining weapon systems and training and deploying military forces. Because of this relatively low priority, real property program and budget analysts must be able to clearly and convincingly convey the impact of policies and resource decisions on the capability of Defense facilities to adequately support Defense requirements. Decision makers should have the information and tools available to make their resource allocation decisions with a firm understanding of both the short and long-term impacts on the whole Defense "system."

During the first Quadrennial Defense Review (QDR) in 1997, analysts from the Military Services, Agencies, and OSD, created a consolidated real property database to assess the force structure's relationship to the real property infrastructure and the related costs for future programming and budgeting. This effort highlighted the inadequacy of current information and methodologies to meet DoD's analytic requirements. Subsequently, OSD has worked with the Service and Defense agency staffs to create a more robust analytic capability. This report is a part of that effort.

Although OSD has not yet established and enforced effective data standards, the Office of the Deputy Under Secretary of Defense (Installations & Environment) (ODUSD(I&E)) has engaged in preliminary work to prepare for data standardization. During the QDR, ODUSD(I&E) noted that the unique facility classification systems used by the services could not support accurate analyses at OSD. In 1998, ODUSD(I&E) worked with the services to create a new classification scheme called Facility Analysis Categories (FACs). The service-unique category codes have been mapped to the FACs. The FACs standardized facility types allowing analysts to:

- Answer questions on how many of a particular facility type exists in DoD;
- Share information and compare;
- Develop and evaluate stationing, sustainment, capacity, and recapitalization requirements; and
- Develop relationship to readiness for each category.

ODUSD(I&E) then published a *DoD Facilities Cost Factors Handbook* (now the *DoD Facilities Pricing Guide*). Two cost factors per FAC were identified: one for sustainment and one for construction. Over 90 percent of the cost factors are based on commercial benchmarks with the sources for each identified in the *Handbook*. The cost factors are intended for use at the programmatic level by any DoD organization.

These two initiatives, standardized facility types and commercially benchmarked cost factors, led to the creation of the DoD Facility Sustainment Model (FSM). FSM projects the costs to sustain

all DoD facilities over the Future Years Defense Program. Before the FAD is used as the feeder system for FSM, its data must be normalized using 80 some business rules and additional data obtained from the Services, Defense Logistics Agency, Tricare Management Activity, and the Department of Defense Education Activity.

The Military Services and Defense Agencies prepare POM exhibits every two years. These exhibits help DoD during its annual review (called the Program Review) of DoD spending plans. DoD is attempting to streamline reporting for the Program Review and would like to reduce the burden it places on the Services/Agencies to prepare the POM exhibits; however, not all real property inventory data required to populate the exhibits are reported in DoD inventory systems. Examples include lease inventory, barracks space and family housing units, fire and emergency service inventory attributes, and utilities information. Many of these areas require data calls to populate the POM exhibits. The data elements maintained in the Services' inventory systems and the proposed DoD consolidated inventory must expand for OSD to produce complete exhibits, conduct comprehensive analysis, and make meaningful decisions from inventory data.

2.2.1   Functional Requirements Using Real Property Inventory Data

Numerous functional areas and organizations within DoD require real property inventory information from all three Military Departments. In addition to the requirements already described, real property inventory data is required to:

- Facilitate the use, management, and maintenance of real property;
- Enable evaluation of real property assets for planning;
- Identify and justify requirements;
- Develop reimbursement rates and support ISSAs;
- Monitor compliance with laws, rules, and regulations;
- Support information requirements of installation tenants;
- Support capacity analyses;
- Support space management and stationing;
- Conduct "what if" assessments at HQ levels; and
- Support reporting requirements.

Each functional area and organization has a unique set of business requirements for which they develop and use information systems. Real property data is required, for example, to support environmental, medical, educational, military operational, BRAC, and family housing programs. No single system related to real property currently serves such a diverse set of requirements. The accuracy problems documented in the audits and the non-standardization of data among the Military Services create a significant challenge to the Warfighter, Defense Agencies, and functional communities when obtaining and using real property data.

Managing DoD Real Property is a significant undertaking with significant impacts. Reliable and on-point information is critical to enable informed decision making by DoD leadership and analysts. Across DoD, dozens of independent real property inventory systems exist. These systems are not structured to readily communicate with each other, resulting in inefficiencies in facility management. Successful real property management depends upon integration at the DoD level and increased collaboration among the various organizations. Accountability at this level

starts with a clearly articulated vision, guiding principles, common practices and processes, and ultimately integrated systems.

Future requirements should be developed using a documented vision to identify appropriate actions to achieve the real property accountability mission. Based on the proposed recommendations in this report the following describe the "To-Be" conditions needed to advance the real property accountability environment:

- Data is entered once at the authoritative source; no data calls or data movement is required;
- Data records are complete and current with management controls to periodically monitor completeness and accuracy;
- Analysts have real-time DoD-wide access to required data and definitions;
- Analysts at all levels use data from the same data sources;
- Analysts spend less time searching for data and more time performing analyses;
- Real property accountable officers spend less time responding to data requests and more time tending to data quality;
- Real property accountable officers are motivated to maintain complete and accurate records;
- Adaptable information architecture readily supports expansion to accommodate new requirements such as linking to geo-spatial data; and
- Resources across DoD needed to obtain and maintain real property information are significantly reduced.

The current real property inventory environment requires change. The OSD and Service headquarters analysts and functional users' communities require access to accurate, up-to-date, standardized real property inventory data as documented in this report.

3.   Future Environment

3.1.   Background

The Installations & Environment (I&E) Domain partnered with the Military Services, Defense Agencies, and other Business Management Modernization Program (BMMP) Business Domains to transform or reengineer business processes for the inventory of real property. The goal is the availability of reliable, timely, and useful core real property asset information to support functional analysis and decision-making as well as financial reporting.

The intent of this initiative is to yield core standard data elements, standard definitions, and business rules that focus on the physical, legal, and financial characteristics of all real property under the custody and control of DoD, worldwide.

In FY 2003, the DoD began the reengineering of the real property inventory (RPI) business processes. Participants representing the Military Services, Defense Agencies, and other Domains identified many core data elements. Inter-Agency and Cross-Service workgroups were established to continue the analysis and resolution of issues.

In FY 2004, the I&E Domain, working jointly, enhanced this foundation by establishing additional work groups to discuss and resolve issues raised by the Military Services and Defense Agencies. Specialty focus groups were engaged to address the inventory needs of communities of interest. Other groups were formed to address a unique identifier for real property, installation versus site definition, attributes of land for RPI, utilities measurement and tracking, accounting issues, leasing, and facility attributes required to enable space management. Specialty focus groups also identified inventory requirements associated with housing, fire and emergency services, and law enforcement and force protection. The issues and resolutions from all the work groups are included as attachments to this report. Output from these groups was used to develop the Business Process Reference Models and a Logical Data Model at Attachments G and E respectively.

3.2.   Proposed RPI Recommendations

The recommendations of this report are designed to refocus and leverage the resources currently expended on real property inventories to create significantly more value for a wider DoD audience. The long-term recommendations cannot be achieved, however, without the cooperation of the Military Services, Defense Agencies, and OSD. The proposed DoD-wide changes to RPI processes and data does not relieve the Military Services and Washington Headquarters Services of their fundamental responsibility to maintain real property inventory records.

3.3.   Core Data Elements

A current problem with the systems used by the Military Services and Defense Agencies for the reporting of their respective real property assets is the lack of standardization with respect to the definitions, attributes, business rules, and validation criteria used for real property data. Therefore, this document recommends the core data elements that are needed in all DoD real

property inventory systems (see Attachment D for the complete listing of core data elements), and establishes common definitions for each.

3.4.   New Concepts and Terms

3.4.1   Installation and Site

The questions "What is an Installation?" and "What is a Site?" were asked at the I&E Workshop Kick-off Meeting held on 12 October 2003. A standard taxonomy is needed to provide support to federal government (including internal DoD) data requests and Congressional inquiries, as well as to ad hoc efforts such as Base Realignment and Closure. Currently, the responses provided to different information requests (e.g., number of installations, number of sites, whether an installation can support a certain requirement, etc.) is not always consistent.

The starting point for resolution of the Installation and Site questions was deliberation of the basic concept and broad definitions of parcel, site, and installation. The group then worked to standardize these definitions specifically for DoD RPI. The establishment of unique installation, site, and parcel identifiers as well as standard definitions will support the distinct difference between the terms "installation" and "site." Today, these two terms have differing meanings based on the discussion at hand. United States Code Title 10 is a good example of this. Definitions of installation and site vary from section to section, with each definition tailored to satisfy the subject addressed in that section.

Standard definitions will allow users DoD-wide to understand installation, site, and parcel when used to identify different elements of the RPI. This will allow guidance, policy, instructions, and regulations to be written without having to list, define, or provide examples of the terms.

To fully develop the concepts, data elements, definitions, business rules, and scenarios involving the relationships among land, facilities, sites, and installations were constructed depicting alternative physical conditions. Business rules and the required data elements (see Attachment D) were defined for each scenario to establish standardized reporting procedures for parcels, facilities, sites, and installations.   These scenarios and additional information on installations and sites are presented in Attachment A.

3.4.2   Parcel

Land is a major asset category for the DoD and a basic building block for all DoD sites and installations. The DoD owns or controls nearly 30 million acres of land that must be effectively accounted for and efficiently managed. The types of land assets in the RPI range from unimproved wilderness areas to central urban developments. Likewise, the land portfolio reflects a myriad of land uses representing the different missions and requirements of the DoD, Military Services, and Defense Agencies. As part of the overall Business Transformation effort, specific attention is targeted to identify and define the essential data elements associated with land for inclusion in the RPI. A goal of this effort is to standardize the definitions, business rules, and reporting of land throughout the DoD and to provide requisite data for land management functions.

Two intermediate goals were to eliminate data duplication and to simplify the RPI processes. Certain issues and corresponding data needs were believed to be asset management related and not within the scope of the core land RPI data attributes.
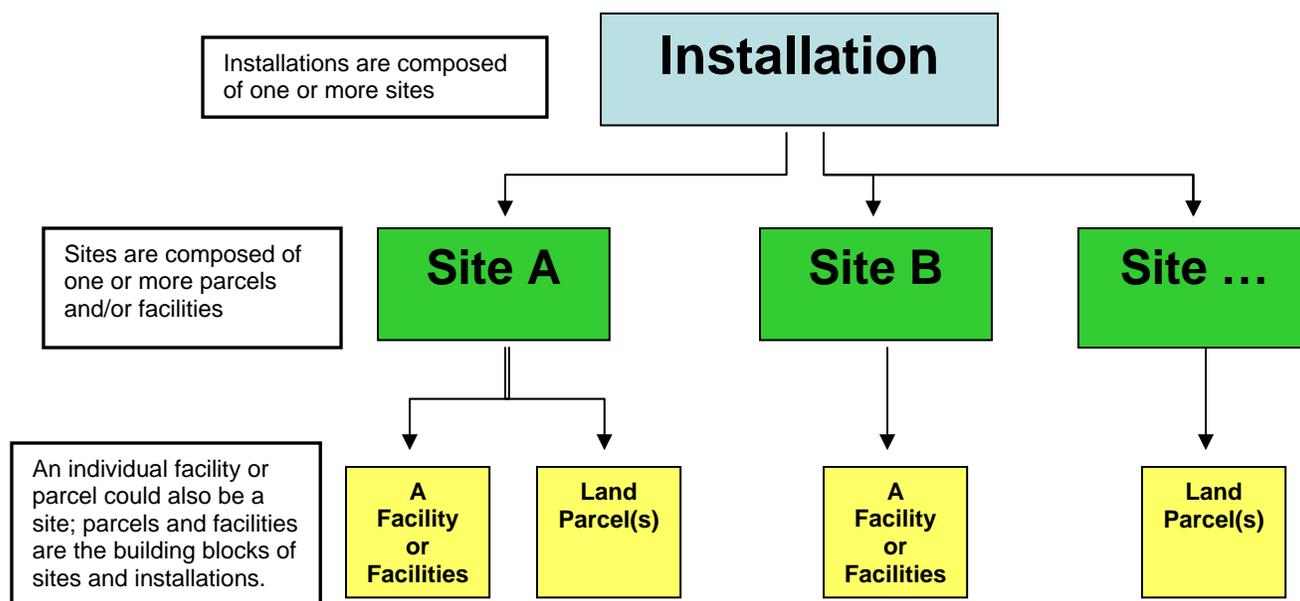
Parcels are the unit of land in the RPI. Parcels are, therefore, the building blocks of land for a site. The boundaries of the parcels (the metes and bounds or other survey method) will delineate the perimeter of the site. A stand-alone parcel can be a site; however, if a parcel is <u>not</u> a stand-alone site, it must be assigned to a site.

Two policy changes are required to effectively implement the land provisions of this report.

- Because land parcels form the building blocks of sites, either as a single parcel or a contiguous group of parcels, they must be completely identified. Land is often inventoried at the aggregate level for each installation rather than at the parcel level. In the "To-Be" environment, Military Services and Defense Agencies will record land assets by parcel in the inventory.
- Currently the DoD categorizes land through the Facility Analysis Categories (FAC) code and equivalent Service Category Codes (CATCODE). In the "As-Is" environment, land category codes identify the acquisition method of the land. Since the core data includes a data element to track acquisition type, the current category codes represent a redundant capability. The approach for the "To-Be" environment is to align the category codes to document the use of the land. This will create an additional information track not currently available. Data could be used to validate land use studies and master planning documents. To implement this recommendation and adjust the policy, a cross-Service working group should be convened under the auspices of ODUSD (I&E) Installations Requirements and Management Directorate. The outcome of the working group should be the revised scheme for land FACs and the appropriate mapping to the revised Service CATCODEs.

DoD categorizes facilities as a building, structure, or linear structure under the custody or control of a Service or the Washington Headquarters Services. Facilities are not assigned to parcels, but are assigned to sites.

Each parcel of land (the building blocks of land) and each facility (building, structure, and linear structure) will be assigned to a site. One or more parcels or facilities can be assigned to a site; however, each parcel or facility can only be assigned to a <u>single</u> site. Contiguous parcels must be assigned to a site. One or more sites may be assigned to any one installation but each can only be assigned to a <u>single</u> installation. Figure 1 graphically presents the relationship among installations, sites, parcels, and facilities. For more details on land attributes see Attachment A.

Installations are composed
of one or more sites

Installation

Sites are composed of
one or more parcels
and/or facilities

Site A   **Site B**   **Site …**

An individual facility or
parcel could also be a
site; parcels and facilities
are the building blocks of
sites and installations.

A Facility or Facilities   **Land Parcel(s)**   **A Facility or Facilities**   **Land Parcel(s)**

Figure 1: The Relationships Among Installations, Sites, Parcels, and Facilities

3.4.3   Real Property Unique Identifier

For the I&E Community, enterprise-wide, readily accessible real property information that is accurate and timely will form the nucleus for functions such as property asset accountability, regulatory compliance, resource requirements for infrastructure, and decision support. In the future or "To Be" environment, DoD real property asset information can no longer be managed as a local, functional, component, or Service "stovepipe" resource. Tying today's disparate real property systems and DoD information needs into an enterprise requires a strong linking mechanism. A unique identifier (UID) readily serves this purpose. In this case, the Real Property Unique Identifier (RPUID) becomes the key element in the RPI that distinctively and uniquely identifies a parcel of land, a building, structure, linear structure, or other real property improvements in which DoD has a legal interest. The RPUID will allow related data from across the spectrum of DoD business areas to be linked to specific real property asset records. The RPUID functions for real property similar to the way in which a social security number functions for an individual. It remains with the asset from its acquisition, will never be reused, and will be archived to history only when DoD has relinquished its interest in the asset.

A UID by definition must be "unique." This is the one and only rule that must be inviolate. There is no requirement for the UID to be either alphabetic or numeric; it can just as easily be alphanumeric. Similarly, a UID can be derived from existing data, parts of existing data combined with a sequencing scheme, or constructed of new, non-derived sequencing data. Terminology-wise, an identifier constructed with any existing data in its structure is called an intelligent identifier. This means that the identifier, or some part of it, has meaning outside the context of its unique identification role. While there is nothing wrong with using an identifier constructed in this way, it is unsuitable as a "permanent" UID if the existing data used within the

UID structure can ever change. A non-intelligent identifier is similarly defined as an identifier that has no specific meaning, in total or in part, outside its unique identifier role.

The RPUID Work Team considered the advantages and disadvantages of both the intelligent and non-intelligent identification schemes and concluded that the non-intelligent identification scheme would prove most advantageous. For more details on this discussion see Attachment A.

All real property, both the assets and the sites to which they are linked, will be uniquely identified. For more details on the RPUID see Attachment A.

3.4.4   Inventory of Non-Owned Assets

Acquiring rights to real property not owned by DoD is a standard practice. The principal rights acquired are the occupancy and use of land or a facility. Rights to real property not owned by DoD are acquired through one of a number of conveyance types evidenced by a written legal agreement. A budgetary saving measure within DoD is for each Military Service to reduce excess, non-useable space and to limit the use of leased space. This is difficult to quantify as not all space used is recorded in the current inventory. Space occupied by a DoD organization but under the control of another federal department or leased by the General Services Administration (GSA) is not reported in the inventory. While this is understandable for reporting purposes outside DoD, it hides a percentage of space requirements within DoD. The lack of visibility impedes proper planning and programming of funds and sub-optimizes the facilities analysis at the installation or even regional level.

The DoD requires much of the same initial data to account for and manage non-owned real property as it does for owned property. The RPI will be augmented to include additional data elements that reflect the nature of the non-ownership acquisition plus the associated terms and conditions of the DoD's interest in the property. The RPI will include the requisite data for managing and administering all non-owned property in which the DoD has an interest as well as performing all accounting functions.

DoDI 4165.14 will be adjusted to include non-owned assets. A policy should be instituted that states that every item of real property acquired by Military Services, Defense Agencies, or WHS must have a written legal instrument to support its acquisition/use. For more details on inventory of non-owned assets see Attachment A.

3.4.5   Linear Structure Concept

Also to be addressed is the definition of utility systems, pavement systems, railroads, fences, etc. as linear structures (or linear assets) and the segmentation of the linear portion (roads, trackage, and distribution lines [pipe and other] of these linear structures into modules.

In the "As-Is" environment, the Military Services track most utilities distribution systems as a single inventory record for each installation. This meets the requirement at the OSD and Military Service headquarters level; however, organizations below that level require further decomposition to effectively manage the real property asset.

There exists the additional complication of identifying the facility assets associated with the complete system. For example, FAC codes 8111 (Electrical Power Source), 8112 (Stand-By/Emergency Power), 8121 (Electrical Power Distribution Line), and 8131 (Electrical Power Substations and Switching) record the electric utility lines as well as the structures and electrical equipment required to generate, transmit, and distribute electricity. However, FAC code 8910 (Utility Building) should include all the buildings that contain utility equipment and functions. A heavy user of RPI information may understand how to generate a complete set of building, structure, and utility data, but an intermittent user may find the process complicated.

A Utilities Work Team was formed and assigned the following primary objectives:

- Define unique utility real property assets;

- Standardize measurement and segmentation of utility assets to ensure consistency in the RPI; and

- Determine the specific asset data elements for inclusion in the RPI.

As the Utilities Work Team deliberated, the issues expanded to include other linear structures (roads, railroads, etc.). The linear assets at each installation are tracked to the same level and share many of the same issues and shortfalls. Both utilities and linear assets are covered under the 8XXX series of FAC codes. For the purposes of this document, the term "network facilities" was developed to identify utility systems and other linear real property assets in which DoD has an interest. These types of assets typically comprise the basic infrastructure of an installation or are part of its general physical plant. Information required for maintenance, management, and ongoing operations will be created and retained by the users of the data in the Real Property Management System (e.g., Public Works/Civil Engineer) or the accounting and finance department. The data elements included for the RPI are the fundamental, core inventory data items required for overall asset accountability and real property management for the life cycle of the asset.

Issues that affect the data elements, definitions, and business rules include:

- Inventory of linear structures of the network (e.g., road system, electrical distribution system, water, and sewer systems);

- Inventory of the non-linear portion of the network (e.g., reservoir, water treatment plant, bridge, trestle);

- Segmentation of linear structures to inventory their segments (e.g., pipeline, road, railroad, electrical power line);

- Inventory of nodes (e.g., pumps, valves, switches, transformers); and

- Geo-spatial integration.

For more details on linear structures see Attachment A.

3.4.6   Accounting Issues

The DoD RPI serves more than one purpose. It is both the key product in supporting the effective management of real property by controlling the inventory and it is a feeder system to the DoD core financial system. The RPI, as a component of an integrated financial infrastructure, is relied on to provide data to core financial and other systems that produce agency consolidated financial statements. Asset accountability and accurate valuation of capital assets are critical factors in support of the Secretary of Defense high priority initiative to have timely, accurate and reliable financial information for use in making effective management decisions and for achieving favorable audit opinions on DoD financial statements.

Hence, a part of the real property inventory transformational work focused on accounting issues and addressed the current financial management deficiencies in the RPI. The working team involved in this process identified the "To-Be" inventory business and financial processes, data elements, and revisions to the current policies to enable optimal financial and management reporting. The proposed "To-Be" resolutions are focused on the achievement of the following goals:

- Provide reliable and timely information for financial reporting and management decision making,
- Minimize duplication and simplify the inventory processes, and
- Address corresponding material weaknesses.

Incorporation of the changes identified in Attachment B will enable optimal financial and management reporting that is consistent with the accepted financial policy of the federal government.

3.4.7   Federal Real Property Council

The signing of Executive Order 13327, Federal Real Property Asset Management, on 4 February 2004, enhanced the focus by senior leaders of the federal government on real property management issues. This Executive Order requires agencies to designate a senior real property officer to oversee federal property assets. Under the Executive Order, the Office of Management and Budget sponsored the Federal Real Property Council to look at many of the same issues identified in this report. As a result of these deliberations, GSA will be responsible to maintain a single comprehensive database of real property assets held by executive branch agencies. The federal agencies have settled on 23 data elements that will be reported to GSA. The effort defined by this document aligns to 20 of these 23 data elements. The three data elements listed below are in addition to those previously defined. Definitions, business rules, and pick list values for all 23 data elements are included in Attachment D.

- **RPA Utilization Code**.   The rate of utilization.
- **RPA Mission Dependency Code**. The value an asset brings to the performance of the mission as determined by the governing agency.
- **RPA Annual Operating Amount**. The annual operating costs of the asset.

3.5.   RPI Process

The RPI common business process focuses on core real property execution functions that enable reporting of real property as well as asset accountability and valuation.

The real property functions within the Real Property Asset Accountability and Valuation Model include:

- Create Initial Asset Record,
- Real Property Purchase,
- Real Property Construction/Restoration/Modernization (CRM),
- Real Property Lease/Ingrants (Operating),
- Real Property Lease/Ingrants (Capital),
- Real Property Outgrants,
- Real Property Physical Inventory,
- Update Asset Record,
- Real Property Disposal, and
- Archive Asset Record.

Accompanying this high-level model are lower-level decompositions for:

- Book or Record Asset (Gain/Loss),
- Create CIP Subsidiary Ledger,
- Record and Manage Revenue,
- Record and Manage Expense,
- Relieve CIP,
- Update Valuation CIP,
- Manage Financial Record of a Sale and Status of Assets,
- Record and Manage Receivable,
- Execute Acquisition Strategy, and
- Monitor and Manage the Program.

These lower level decompositions represent further detail of the real property functions described above. The Real Property Asset Accountability and Valuation Model (see Attachment G) graphically represents the full inventory process. This model is integrated with the core data elements in Attachment D as well as with the data models in Attachments E and F.

The following subparagraphs describe the real property functions within the Real Property Asset Accountability and Valuation Model.

3.5.1   Create Initial Asset Record

The Create Initial Asset Record process is based on the execution of a contract/order/real estate instrument for a Real Property Acquisition, or the performance of a physical inventory, that results in the identification of an asset that does not exist in the inventory system. It contains the basic physical, legal, and financial characteristics of the asset. For Real Property assets, it includes the assignment of a unique identifier.

The "Signed Contract/Order" sequence flow from the Manage Procurement/Sales process triggers the following Create Initial Asset Record processes.

1. **Aggregate Initial Asset Record**. Accumulate existing physical, legal, and financial information into the initial asset record.

2. **Assign/Generate Unique Identifier**. Assign an RPUID to a Real Property asset upon the award of a contract, order, or instrument for actions such as a Real Property Construction, Purchase, Ingrants, or Transfer of an asset. The RPUID enables total asset visibility and accountability.

3. **Validate Asset Data Elements**. Ensure that asset information correlates to the established data elements in the inventory system. Verify that the asset information is correct and complete. Two conditional flows are generated from this process; "Complete" and "Incomplete."

The "Complete" conditional flow from the Validate Asset Data Elements process illustrates that all the required data elements contain valid and complete data. This message flows to the Populate Asset Data Elements process. Once the asset date elements are populated, the creation of the Initial Asset Record is complete.

The "Incomplete" conditional flow illustrates that certain data is entered incorrectly and must be corrected before the creation of the Initial Asset Record is complete.

3a. **Define Asset Data Elements**. Create and define asset data entered incorrectly.

3b. **Define/Validate Asset Data Structure**. Define and validate the data structure for asset data.

3c. **Define/Validate Asset Data Relationships**. Define and validate the relationships between asset data that does not exist in the inventory system.

4. **Populate Asset Data Elements**. Once the asset data is populated, the creation of the Initial Asset Record is complete.

The initial population of the asset record should include information about the acquisition instrument (contract), the project information, the physical address of the asset, the initial configuration (i.e., the FACs as the facility was designed and size/units), as well as the RPUID.

3.5.2   Perform Real Property Purchase

This process starts with an approved acquisition plan. This plan feeds the Execute Acquisition Strategy process. For Real Property, this process includes but is not limited to identifying the provider of the asset for purchase, conducting pre-purchase tasks such as appraisals, and other property acquisition and approval tasks. This process generates a sourced requirement that is used to establish and execute the Purchase Contract "Sales/Contract" in the Manage Procurement/Sales process. From this process, a sequence flow "Signed Contract/Order" is generated that triggers the creation of an initial asset record for the Real Property Purchase

process. The Create Initial Asset Record process assigns an RPUID to the property. A message flow "Sales Contract/Order Notification" is also generated to the Non-DoD Source (provider).

The Non-DoD Source provides the Real Property through the message flow "Goods/Asset Tendered and Services Rendered," which flows into the Monitor and Manage the Program process (this includes Receipt and Acceptance). Within this process, the Real Property asset is received, inspected, and accepted based on the terms and conditions of the contract. Upon acceptance of the real property, the asset record is updated through the message flow "Asset Placed in Service Notification." The "Acceptance Evidence" message flow generated from the Monitor and Manage the Program process flows into the Record and Manage Payable process.

If the purchase of a Real Property Asset meets the asset capitalization criteria, but does not meet the Construction in Progress (CIP) account criteria (costs for purchases are not accumulated in the CIP account), the purchase cost flows from the decision gateway "Asset Meets CIP Criteria?" to the Book or Record Asset process. This process posts the asset value/transaction to the General Ledger and sends the "Real Property Asset Value" message to the Update Asset Record process. The Asset Record process generates depreciation expense information through the message flow "Depreciation/Amortization Expense" that flows to the Record and Manage Expenses process. Transactions from this process are posted to the General Ledger.

The Monitor and Manage the Program process also generates a flow "Asset Available" into the decision gateway "Real Property Asset." The "yes" path indicates that the asset is a Real Property item and is ready for use. This is represented by the flow "Real Property Placed in Service Notification" which flows to the Real Property Stewardship process.

For purchased property, all data elements of the asset record except those associated with the disposal process should be completed.

3.5.3 Perform Construction/Restoration/Modernization (CRM)

The Perform Construction/Restoration/Modernization (CRM) process incorporates real property construction, restoration, and modernization activities such as engineering and architectural design, scheduling, executing construction tasks, inspection as specified by a contract, updating the Real Property CIP account, and providing associated non-financial transactions. It uses resources for improving facilities and replacement work to restore facilities damaged by actions such as inadequate sustainment, excessive age, natural disaster, fire, accident, or other causes. It assists in the alteration of facilities solely to implement new or higher standards (including regulatory changes), to accommodate new functions, or to replace building components that typically last beyond overall service life (such as foundations and structural members).

This process starts with an "Approved Acquisition Plan." This plan feeds the Execute Acquisition Strategy process. A "Valuation Template Request" is generated to the Establish and Update Valuation Conventions process. This identifies the valuation methodology to be used based on approved policies to capture direct and indirect costs of program assets. The methodology will consider the type of funding (R&D, procurement, O&M); the type of program costs (direct and indirect); type of assets (capital and expensed); the useful lives of end-items and major components; the costs to be aggregated into the end item cost (e.g., direct labor, government furnished parts); which items are to be valued separately (e.g., support equipment);

and whether government furnished material (GFM) is being provided to the contractor. Once the valuation template is updated, it becomes part of the Execute Acquisition Strategy process through the "Valuation Template Notification" message.

The Execute Acquisition Strategy process generates a "Sourced Requirement," that is used to establish and execute the Purchase Contract (Sales/Contract) in the Manage Procurement/Sales process. From this process, a sequence flow "Signed Contract/Order" is generated. This flow triggers the creation of an Initial Asset Record for the Real Property asset to be constructed. The Create Initial Asset Record process assigns an RPUID to the property. The "Sales Contract/Order" flows into a gateway from the Manage Procurement/Sales process before "forking" out to the Perform Construction/Restoration/Modernization process.

A message flow "Contract/Order Award Notification and CIP Request" triggers the Create CIP Subsidiary Ledger process. The RPUID and the Valuation Template are associated with this process.

During the Construction/Restoration/Modernization process, the message flow, "Government Furnished Materiel Required Request" triggers the provision of materiel and supplies required to perform or complete a construction/restoration/modernization project. The sequence flow "Goods/Asset Tendered and Services Rendered" from the DoD/Non-DoD User/Source pool represents the GFM. This flows into the Monitor and Manage the Program process. Once the GFM is inspected, received, and accepted it is provided to the construction/restoration/ modernization process through the message flow "Asset Available" that flows into the decision gateway "Real Property Asset?".

The "Government Furnished Materiel Provided" message from the gateway flows to the Perform Construction/Restoration/Modernization process. During this process, the invoices/progress payments, including design costs, are remitted through the "Asset Tendered or Services Rendered" message that flows to the Monitor and Manage the Program process.

Upon acceptance of the service, the "Acceptance Evidence" message flow generated from the Monitor and Manage the Program process flows into the Record and Manage Payable process. Since the CRM process meets both the Asset Capitalization and Construction in Progress (CIP) criteria, the costs flow from the decision gateway "Asset Meets CIP Criteria?" to the Update Valuation CIP process. This process posts the CIP information to the General Ledger. If a Real Property design is not approved for construction within the Future Years Defense Plan upon milestone review, a "CIP Cancellation Notice" is generated from the Monitor and Manage the Program process to the Relieve CIP process. These design costs are non-capitalized and consequently flow to the Record and Manage Expenses process. The transactions from this process are posted to the General Ledger.

Upon interim acceptance of an asset, the "Asset Placed in Service Notification" from the Monitor and Manage the Program process triggers an update to the Asset Record and the Relieve CIP processes. The "Capitalized Cost" flows into the "Book or Record Asset" process that then generates the "Real Property Asset Value" message to the Update Asset Record process. The Update Asset Record process generates depreciation expense information through the message

flow "Depreciation/Amortization Expense." This flows to the Record and Manage Expenses Transactions process. From here, transactions are posted to the General Ledger.

The Monitor and Manage the Program process also generates a flow "Asset Available" into the decision gateway "Real Property Asset?". The "yes" path indicates that the asset is a Real Property item, represented by the flow "Real Property Placed in Service Notification." This flows to the Real Property Stewardship process.

Upon final acceptance of an asset, the "Asset Placed in Service/Contract Closed Notification" from the Monitor and Manage the Program process triggers an update to the Asset Record through the flow "Asset Placed in Service Notification." This triggers the "Relieve CIP" process. The "Capitalized Cost" for the Real Property asset flows into the "Book or Record Asset" process that generates an "Asset Value" to the Update Asset Record process. This process generates depreciation expense information through the message flow "Depreciation/Amortization Expense." This flows to the Record and Manage Expenses process. Transactions from this process are posted to the General Ledger.

The Monitor and Manage the Program process also generates a flow "Asset Available" into the decision gateway "Real Property Asset?" The "yes" path indicates that the asset is a Real Property item and is ready for use. This is represented by the flow "Real Property Placed in Service Notification" which flows to the Real Property Stewardship process.

At the completion of a new footprint construction effort, the data elements not populated initially will be completed, and the data elements populated initially will be reviewed and updated as necessary. The key characteristics to be populated at this time are the acquisition data (including cost to government), the Placed in Service Date, the user(s) of the facility, and the physical attributes of the facility.

At the completion of a restoration or modernization project, all data elements associated with the project (project number, cost, description, type, Placed in Service Date, funding organization and fund type) will be entered. If the project changes the physical attributes of the facility, the affected attributes will be updated.

3.5.4   Perform Real Property Lease/Ingrants (Operating)

This process starts with an approved acquisition plan, which feeds the Execute Acquisition Strategy process. This process generates a sourced requirement that is used to establish and execute the Purchase Contract (Sales/Contract) in the Manage Procurement/Sales process. From this process, a sequence flow "Signed Contract/Order" is generated that triggers the creation of an initial asset record for the Lease/Ingrant. The Create Initial Asset Record process generates/assigns an RPUID for the leased property. The message flow "Sales Contract/Order Notification" is generated to the Non-DoD Source pool (Lessor).

The Lessor provides the lease/ingrant through the message flow, "Goods/Asset Tendered and Services Rendered." This flows into the Monitor and Manage the Program process that includes Receipt and Acceptance. Within this process, the Real Property asset is received, inspected, and accepted. Upon acceptance of the real property, the Asset Record is updated through the message flow "Asset Placed in Service Notification." The acceptance evidence message flow

generated from the Monitor and Manage the Program process flows into the Record and Manage Payable process. This process determines if the lease costs/terms and conditions meet the capitalization criteria. Operating lease costs flow through the Record and Manage Expense process and the transaction is posted to the General Ledger.

Ongoing lease payments are captured in the model when the Non-DoD source tenders an invoice through the message flow "Goods/Asset Tendered and Services Rendered," which flows through the Monitor and Manage the Program process. The acceptance evidence generated from this process flows into the Record and Manage Payable process. This process determines if the lease costs/terms and conditions meet the capitalization criteria. Operating lease costs flow through the Record and Manage Expense process and the transaction is posted to the General Ledger.

For leased/ingranted property all data elements of the asset record, except those associated with the disposal process should be completed.

3.5.5   Perform Real Property Lease/Ingrants (Capital)

The process for capital leases is similar to that for operating leases. The difference between an operating and capital lease is further defined when the acceptance evidence message is generated from the Monitor and Manage the Program process. This acceptance evidence flows into the Record and Manage Payable process, which determines if the lease costs/terms and conditions meet the capitalization criteria. Capital leases meet the capitalization criteria, but do not meet the CIP account criteria, (costs for capital leases are not accumulated in the CIP account). These costs flow to the Book or Record Asset process that then posts the asset value transaction to the General Ledger and sends a "Real Property Asset Value" message to the Update Asset Record process. This process generates amortization expense information through the message flow "Depreciation/Amortization Expense" that flows to the Record and Manage Expenses process. The transactions from this process are posted to the General Ledger.

For leased/ingranted property, all data elements of the asset record, except those associated with the disposal process should be completed.

3.5.6   Perform Real Property Outgrants

The Perform Real Property Outgrants process includes establishing, renewing, or terminating a contract or legal agreement (easement, lease, license, permit, or use agreement) that conveys/authorizes the use of a DoD-managed real property item to either a government agency or private entity for a specified consideration (rent or other remuneration).

This process starts with an "Approved Acquisition Plan" sequence that feeds the Execute Acquisition Strategy process. For Real Property, this process includes but is not limited to negotiating the terms and conditions of the outgrant and other approval tasks. The Execute Acquisition Strategy process generates a "Sourced Requirement" that is used to establish and execute a Real Estate Instrument "Sales/Contract" in the Manage Procurement/Sales process.

The "Sales Contract/Order" sequence flows into a gateway before "forking" out to the Perform Real Property Outgrants process. Upon conveyance/execution of the Outgrant, the conditional flow "Real Property Outgrant Evidence" triggers an update to the Asset Record. The "Outgrant Executed Notification" message flow is provided to the DoD/Non-DoD user. The DoD/Non-

DoD user remits rent or other remuneration for the use of the real property asset through the "RP Outgrant Payment Received" message. This flows to the Record and Manage Revenue process, which generates a sequence flow to the Manage and Record Receivable process. This process posts the Real Property Outgrant transaction to the General Ledger.

Upon completion or termination of an outgrant, the "Goods/Asset Tendered and Services Rendered" message flows into the Monitor and Manage the Program process. The Real Property is received and accepted, the contract is closed, and the asset record is updated through the "Asset Placed in Service Notification" flow. The asset is now available for use. This is represented by the "Asset Available" conditional flow proceeding from the Monitor and Manage the Program process into the decision gateway "Real Property Asset?". The "yes" path in this gateway indicates that the asset is a Real Property item and is ready for use. This is represented by the flow "Real Property Placed in Service Notification" which flows to the Real Property Stewardship process.

For outgranted property, the data elements of the asset record that identify the use and user of the asset should be modified.

3.5.7   Conduct Real Property Physical Inventory

The Conduct Real Property Physical Inventory process verifies the existence, location, quantity, interest, and condition of Real Property assets to ensure accountability and enable accurate valuation.

The "Physical Inventory Required" event, which may be ad-hoc or temporal, triggers the following Conduct Physical Inventory processes.

1. **Count Assets**. Physically count/verify assets to ensure accountability (existence, location, quantity, interest, and condition) and enable accurate valuation. The physical inventory count is based on an existing inventory control methodology and plan. During the Count Assets process, if an asset is discovered that does not exist in the inventory, an Initial Asset Record is created through the message flow "Asset Record Does Not Exist." The process is then continued.

2. **Aggregate Asset Inventory Count Results**. Accumulate the results of the physical inventory for analysis of variance.

3. **Review Asset Inventory Count Results**. Determine the cause(s) of variances during the execution of a physical inventory. If the variance is unacceptable based on preset statistical inventory control criteria, a conditional flow "Unacceptable Variance" is sent to the Perform Root Cause Analysis and Reform Inventory Control Procedures process. If the results of the inventory count are acceptable, a message flow is generated to the Approve Asset Inventory Count Information process.

4. **Perform Root Cause Analysis and Reform Inventory Control Procedures**. Determine the source of and reason for inventory variances resulting from the execution of a physical inventory. Identify appropriate modifications to the inventory control procedures.

5. **Approve Asset Inventory Count Information**. Results in the acceptance of the physical inventory count by an authorized official. Once the physical inventory is completed, the asset record is updated through the "Physical Inventory Adjustment" message.

If an asset attribute has changed since the last physical inventory, the appropriate data elements will be updated with the current information.

3.5.8   Update Asset Record (I&E)

The Update Asset Record process updates asset records with information based on a change to the physical or legal aspects of an asset. For Real Property, this includes but is not limited to actions such as construction/restoration/modernization, demolitions, purchase, transfer, sale, ingrants, outgrants, donations, or exchanges. The value of the Real Property asset is recorded in the inventory/accountability system upon interim or final acceptance. Information provided by this system includes but is not limited to valuation information (such as depreciation and amortization), inventory adjustments, asset specifications, asset status, ownership, and other non-financial data.

All attributes of the asset will be reviewed and the appropriate data elements updated with the current information.

3.5.9   Perform Real Property Disposal

The Perform Disposal process includes all activities associated with the final disposition of an asset. It includes, but is not limited to, reassignment to other DoD entities, transfer to another DoD or Non DoD entity, exchange, donation, loss by disaster, demolition, and sale.

This process starts with the conditional flow "Excess Real Property Declaration" from the Perform Service Installation ESOH Stewardship (Perform RP Outgrants) process into the Perform Real Property Disposal process. The flow "RP Operation Ceased Notification" updates the asset record upon cessation of Real Property operations or the occurrence of a natural disaster. Once the disposal method is identified, as represented by the Off-Page Connector "Disposal Method Identified," the disposal action is planned and sourced through the Execute Acquisition Strategy process. This process generates a sourced requirement that is used to establish and execute the "Sales Contract/Order" from the Manage Procurement/Sales process. This message flows into a gateway from the Manage and Procurement/Sales process before "forking" out to the Perform Real Property Disposal process where the identified disposal action is executed. For a demolition action, the Real Property Installed Equipment is recovered and sent to another entity such as an item or materiel manager within a logistics warehouse/depot. The demolition service "Goods Tendered/Services Rendered" is then received and accepted. Because this is a demolition, the costs flow through the Record and Manage Expense process and the transaction is posted to the General Ledger.

Upon acceptance of the disposal action, the asset record is updated through the acceptance message flow, "Real Property Action Accepted." The message flow generated from the Monitor and Manage the Program process flows into the Record and Manage Payable process. This determines if the costs/terms and conditions meet the capitalization criteria.

For donations, transfers, and exchanges, only the asset record is updated. This is accomplished through the message "Asset Placed in Service Notification." For the sale of a Real Property Asset, the message flow "Procurement Evidence" feeds this process, as well as the Manage Financial Record of Sale and Status of the Asset from Monitor process, and the Manage the Program process. The "Receivable File" conditional flows from the Manage Financial Record of Sale and Status of the Asset process to the Record and Manage Receivable process. Transactions from this process are posted to the General Ledger.

Furthermore, a conditional flow, "Potential Gain or Loss," flows from the Manage Financial Record of Sale and Status of the Asset process to the Book or Record Asset (Gain/Loss) process. If there is a loss from the sale of an asset, the conditional flow "Loss on Sale of Asset" flows to the Record and Manage Expenses process. Transactions from this process are posted to the General Ledger. If there is a gain from the sale, the conditional flow "Gain on Sale of Asset" flows to the Record and Manage Revenue process. This process generates a sequence flow to the Manage and Record Receivable process, which posts the transaction to the General Ledger.

Disposal characteristics will be entered starting with the declaration of excess and estimated disposal data elements. As the fate of the asset is known, the actual disposal information will be entered accordingly.

3.5.10 Archive Asset Record (I&E)

The Archive Asset Record process stores/flags asset records that are no longer in an active status. These records can be retrieved upon request for future liability issues, reporting, and audit trail purposes. This process is triggered by the message "Asset Records Meet Archive Criteria" from the Update Asset Record process.

Once the asset record is flagged for archive, it will no longer appear on reports that identify DoD assets.

3.5.11 Other Process I&E and Non I&E Definitions

Book or Record Asset (Gain/Loss)

This process posts the amount paid for an asset and the calculated gain to revenue or loss to expense resulting from its disposal. The asset is either for use in the mission or developed for resale.

Create CIP Subsidiary Ledger

The Create CIP Subsidiary Ledger process establishes a CIP account to accumulate design and construction costs. These costs are associated with an RPUID for the asset. CIP is an accounting term that refers to the temporary classification of assets that are being built before being placed in service.   Each CIP account may track one to hundreds of items. Each item may represent the sum of numerous expenses or invoices. The sum of the individual expenses for an item in the CIP account associated with a RPUID will determine the value of the fixed asset when it is placed into service.

Record and Manage Revenue

This process recognizes and records amounts earned and unearned by the DoD for providing goods and services within a specified accounting period to include reimbursable earnings as supported by legislative actions. The management of revenue includes the use of application of revenue collections according to treasury regulations.

Record and Manage Expense

This process includes the timely posting to the appropriate accounts, authorized expense transactions, and the cost of assets consumed. It also includes the cost objects to be used by the organization's mission within the designated accounting period. The management of expense includes recognizing the appropriate accruals and deferrals for the accounting period.

Relieve CIP

The Relieve CIP process includes transferring the accumulated balance from the CIP account to the asset account at the time the asset is placed in service. An interim Transfer and Acceptance of Military Real Property document (DD1354) is signed for the constructed real property assets at the time the facility or improvement to a facility is available for use by DoD. Title for assets listed on the acceptance form are transferred. The punch-list of additional work and certificate of occupancy by local authorities are also attached. Once the final payments are made, claims settled, and the contract closed out, the CIP account will be relieved. Any balance transferred to the asset account after placing the asset in service should be adjusted for the final payments accumulated in the CIP account.

Update Valuation CIP

The Update Valuation CIP process accumulates construction costs in the CIP account. For real property assets, the balance will remain in the CIP account until the asset is placed in service. All costs incurred to bring the asset to a form and location suitable for its intended use are included: (1) Cost of contract work; (2) Direct cost of labor; (3) Direct cost of materials and supplies; (4) Cost of Supervision, Inspection, and Overhead; (5) Cost of transportation, (6) Cost of handling and storage; (7) Cost of injuries and damages, (8) Cost of legal and recording fees; (9) Cost of architecture and engineering studies; (10) Cost of facility and site preparation; (11) Cost of installed equipment; (12) Cost of government furnished equipment or material (GFE and GFM); and (13) Cost of donated assets.

Manage Financial Record of a Sale and Status of Assets

This process records the information from a Contract Sale/Order into revenue, receivables, or cash. It also records the status of assets based on the sale/exchange or disposal of available goods. The management of financial information related to assets and inventories includes transaction aging and valuing at the start and end of the accounting period in order to arrive at the cost of goods sold.

Record and Manage Receivable

This process recognizes and records a claim to cash or other assets against other entities, either based on legal provisions, such as payment due date, for goods tendered or services rendered and debts due to the DoD, within a specified accounting period. The management of receivables

involves the collection of amounts due, including administrative fees, interest, and penalties. The process also includes aging, write-offs, and debt adjudication.

Execute Acquisition Strategy

The Execute Acquisition Strategy process executes the critical events that govern the management of a program, to include development, testing, initial production, and life-cycle support. Contracts will support the acquisition strategy. The process also supports the identification of the source to satisfy a requirement and preliminary decisions leading to the business process to follow (internal, external, exchange, lease, contract, HR, etc.). Processes include pre-solicitation notices, draft RFP/RFI, developing new or identifying existing sourcing vehicles, and preparing the requisition. Asset accountability plays a part in decisions such as lease/buy, GFE/GFP, and matching requirements with known HR capabilities.

Monitor and Manage the Program

This process manages and tracks requisition and subsequent execution of a purchase contract (obligation), modification, contract monitoring, administration, and receipt and acceptance.

3.6.   Strategic Alignment with Mission and Goals

The Balanced Scorecard Strategy Map aligns DoD, I&E, and Business Management Modernization Program (BMMP) objectives. See Figure 2. The objectives link to help DoD managers track progress toward the achievement of an improved facility program and related policy decisions through increased visibility of assets. The logical connections are as follows.

- **Improved Asset Visibility**. Enables better space management and valuation of assets, and facilitates the re-engineering of business processes. This is consistent with the DoD Balanced Scorecard Framework quadrant entitled, "Future Challenges," which includes Defining and Developing Transformation Capabilities, and Enabling More Effective Organizations.
- **Improved Space Management**. Enables effective use of real property, a side benefit to the business goal. Likewise, the BMMP objective of "re-engineered business processes" enables the DoD requirements for reduction in information cycle time and business systems cost. These results are consistent with the DoD Balanced Scorecard Framework quadrant entitled "Operational," which includes Posturing the DoD for Success, and the Employment of Assets and Processes in a Consistent Way.
- **Improved Valuation of Assets**. Responds to the material weaknesses identified in many Inspector General and audit findings. The BMMP objective "clean audit" enables DoD to maintain better accountability of its real property assets. This is consistent with the DoD Balanced Scorecard Framework quadrant entitled, "Institutional," which includes Decision Process Streamlining, Enhanced Financial Management, Quality of Key Facilities, and Better Management of Overhead and Indirect Costs.
- The end result of implementing this strategy includes **Improved Operations of Properties and Accountability of Assets and Reduction in Business Systems Cost and Information Cycle Time**. These are consistent with the DoD Balanced Scorecard Objective of "Force Management," which includes the Maintenance and Enhancement of Workforce Satisfaction, Sustainability of Tempo, and the Reasonableness of Force Cost.
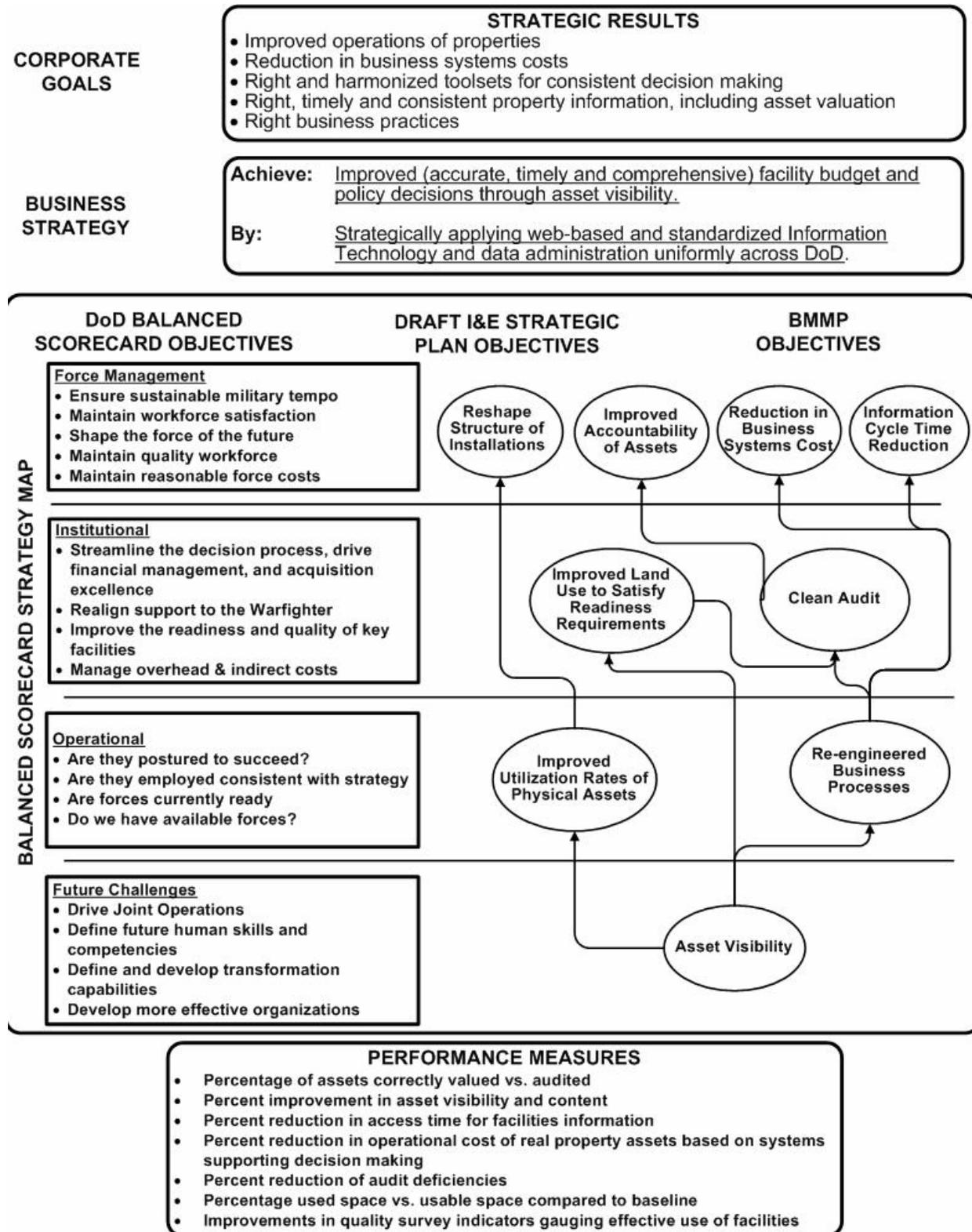
Figure 2: Preliminary Balanced Scorecard Strategy Map for Real Property Inventory

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