

**REAL PROPERTY ASSET MANGEMENT  
GUIDING PRINCIPLES**

**EXECUTIVE SUMMARY**

Asset management defines the relationship between a property holding agency (i.e., the “owner”) and its property assets. This relationship includes, but is not limited to: financial asset management, day-to-day property management, and occupant satisfaction. The asset management relationship lasts for the entire property life-cycle – from acquisition and utilization to disposal.

Real property asset management presents a variety of challenges that are global in nature and affect both the public and private sectors. Asset management succeeds when organizations implement and use an effective strategic-planning framework to make real property decisions. The guiding principles that comprise this framework are summarized below. The principles are later defined and illustrated with case study examples.

- 1. Support Agency Missions and Strategic Goals** by aligning real property decisions with the agency’s strategic mission.

*Case Study:* The Capital Asset Realignment for Enhanced Services (CARES) Program at the Department of Veterans Affairs Analyzes its Healthcare Infrastructure

- 2. Use Public and Commercial Benchmarks and Best Practices** to assess Federal agency asset management performance.

*Case Study:* General Services Administration’s Public Buildings Service Benchmarks Lease Costs to Private Sector

- 3. Employ Life-Cycle Cost-Benefit Analyses** to justify asset management and acquisition decisions.

*Case Study:* Office of the Architect of the Capitol Integrates Facility Condition Assessments, Master Plans, and Capital Improvements Programming

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- 4. Promote Full and Appropriate Utilization** by operating the property asset to its maximum capacity during its useful economic life (determined by using the Government's financial accounting standards<sup>1</sup>) while satisfying the occupying agency's mission requirements.

*Case Study:* Department of the Army Creatively—and Effectively—Utilizes a Mission-Critical Asset

- 5. Dispose of Unneeded Assets** by redeploying, demolishing, or replacing the asset when it fails to support the agency's mission.

*Case Study:* Real Property Asset Listing Portal Transforms the Disposal of Excess Federal Assets

- 6. Provide Appropriate Levels of Investment** by making and prioritizing capital investment decisions, such as whether to construct, alter, repair, and/or acquire space to meet changing agency needs.

*Case Study:* Lawrence Berkeley National Laboratory Prioritizes Capital Investment Decisions through Integrated Facilities Assessment System

- 7. Accurately Inventory and Describe All Assets** by submitting real property data at the constructed asset level (e.g., each building/structure within a complex) as defined by the Federal Real Property Council.

*Case Study:* Case Study: U.S. Department of Agriculture's Corporate Property Automated Information System (CPAIS) Program Improves Inventory Accuracy

- 8. Employ Balanced Performance Measures** to track progress toward achieving real property management objectives and enable benchmarking against public and private sector organizations.

*Case Study:* GSA PBS's Linking Budget to Performance (LB2P) Program Uses Scorecard Measures to Reward Good Performance

- 9. Advance Customer Satisfaction** by promoting productive work spaces and focusing on the tenant's needs, primarily changing space requirements.

*Case Study:* General Services Administration's Lease Administration and Management Program Leads to Improved Customer Satisfaction Scores

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<sup>1</sup> For additional information, contact the agency's Chief Financial Officer (CFO) staff.

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**Provide for Safe, Secure, and Healthy Workplaces** by implementing standard policies and procedures, documenting asset conditions, and developing action plans and strategies to support a productive workforce.

*Case Study:* Case Study: Sustainable Features an Integral Component of U.S. Environmental Protection Agency Potomac Yard Facility **OR** Green Building Improves Workplace Performance and Customer Service at the Chesapeake Bay Foundation

**PRINCIPLE #1**

**SUPPORT AGENCY MISSIONS AND STRATEGIC GOALS**

Real property is the physical foundation that enables Federal agencies to accomplish their missions. Effective asset management—including property acquisition, operation, maintenance, and disposition—requires alignment with the agency’s core mission and key decisions. This integration involves having a clear understanding of the agency’s core mission, its strategic plan, and how real property supports that plan.

Real property managers should collaborate with their customers to develop workplaces—including real property products and services—that adequately support the occupants’ short- and long-term goals.

**Case Study: The Capital Asset Realignment for Enhanced Services (CARES) Program at the Department of Veterans Affairs Analyzes its Health Care Infrastructure**

A majority of the Department of Veterans Affairs (VA) facilities were designed and constructed when medical care was synonymous with hospital care – a very different environment than today’s medical world of outpatient care and prescription drug capabilities. Upon entering the 21<sup>st</sup> century with an outdated infrastructure, the VA realized that its facilities were out of step with changes in the practice of medicine, the veterans VA serves, and the changes in the VA health care benefits package.

As a result, in 2002, the VA initiated the 20-year comprehensive Capital Asset Realignment for Enhanced Services (CARES) program – the most comprehensive analysis of VA’s health care infrastructure ever conducted. Through the program, the VA evaluates the health care services it provides, identifies the best ways to meet veterans’ future health care needs, and realigns its medical facilities and services to meet those needs more efficiently and effectively. CARES prepares the VA for meeting the current and future health care needs of veterans in modern health care facilities.



Through the CARES program, the VA has decided to update the Canandaigua VA Medical Center, located in upstate New York, with a new multi-specialty outpatient clinic and nursing home complex. The Canandaigua facility has been in operation for more than 75 years.

*Photo courtesy of the Department of Veterans Affairs.*

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Through CARES, the VA is able to identify the appropriate function, size, and location for VA facilities—which total more than 4,900 buildings on more than 15,000 acres of land—as well as for more than 100 major construction projects in 37 states, the District of Columbia, and Puerto Rico. CARES encourages the VA to effectively manage the reuse of vacant and underutilized VA properties by considering the:

- Appropriate clinical role of small facilities.
- Amount of vacant space.
- Potential for enhanced use leases.
- Consolidation of services and campuses.

To maximize its return on investment, the VA will seek real property flexibilities by exploring the following possibilities:

- Implement enhanced use leases.
- Leverage the investment value of unneeded assets.
- Institute a more flexible disposal authority.
- Develop strategies for managing historic properties.
- Consider all options for disposal of underused property.

VA is projecting that CARES will ultimately decrease vacant space in the Veterans Health Administration from 8.57 million square feet to 4.93 million square feet – a reduction of 42.5 percent. In addition, VA predicts that from 2006 to 2022, CARES will help reduce the cost of maintaining vacant space from an estimated \$3.4 billion to \$750 million, allowing VA to redirect those funds to patient care. Annual updates with new forecasts of future facility demands have also been incorporated into the VA strategic planning process.

CARES is an important vehicle for fulfilling the agency mission, first uttered by President Lincoln in 1864, “to care for him who shall have borne the battle for his widow and orphan.” While Lincoln’s pledge still remains VA’s steadfast mission to this day, medical care is constantly changing and evolving – and by evaluating and upgrading its facilities, VA is recognizing its past, maximizing its present, and planning for its future.

**Source: VA CARES website, [www.va.gov/cares/](http://www.va.gov/cares/)**

**PRINCIPLE #2**

**USE PUBLIC AND COMMERCIAL BENCHMARKS AND BEST PRACTICES**

Federal agencies should leverage leading public and private sector benchmarks to evaluate asset performance and help plan for future investments. Given the diversity of the Government’s real property portfolio, Federal agencies may find it useful to benchmark against other agencies. Benchmarking property performance and sharing best practices have proven to be effective tools for optimizing asset management.

To be defined as a best practice, the initiative must:

- Produce superior results.
- Lead to exceptional performance.
- Be recognized by an industry expert.
- Be deemed a best practice by an agency’s customers.
- Be a new or innovative use of human capital, resources, or technology.

Benchmarking is the process of continuously comparing and measuring an organization’s performance—against that of other comparable organizations—to gain information on philosophies, practices, and data for measures. This comparison encourages organizations to take appropriate action(s) to improve their performance.

Best practices are specific business methods, processes, or initiatives that work for one agency. Sharing best practices promotes innovation and provides ideas, options, and insights for other agencies.

By routinely benchmarking performance and sharing best practices, Federal agencies can better manage their portfolios, thereby developing high performance workplaces, improving citizen services, and protecting the environment.

**Case Study**

**General Services Administration’s Public Buildings Service Benchmarks Lease Costs to Private Sector**

The General Services Administration (GSA) Public Buildings Service (PBS) manages more than 8,500 private sector leases at an annual cost of over \$4 billion. Due to their extensive leasing volume, PBS continually ensures that the rent transactions they pay are competitive with those paid by the private sector. PBS partners with the Logistics Management Institute (LMI) to measure and analyze PBS leasing performance relative to industry. PBS has established a long-term national goal of 9.5% below the industry mid-point, to be reached by fiscal year (FY) 2010.

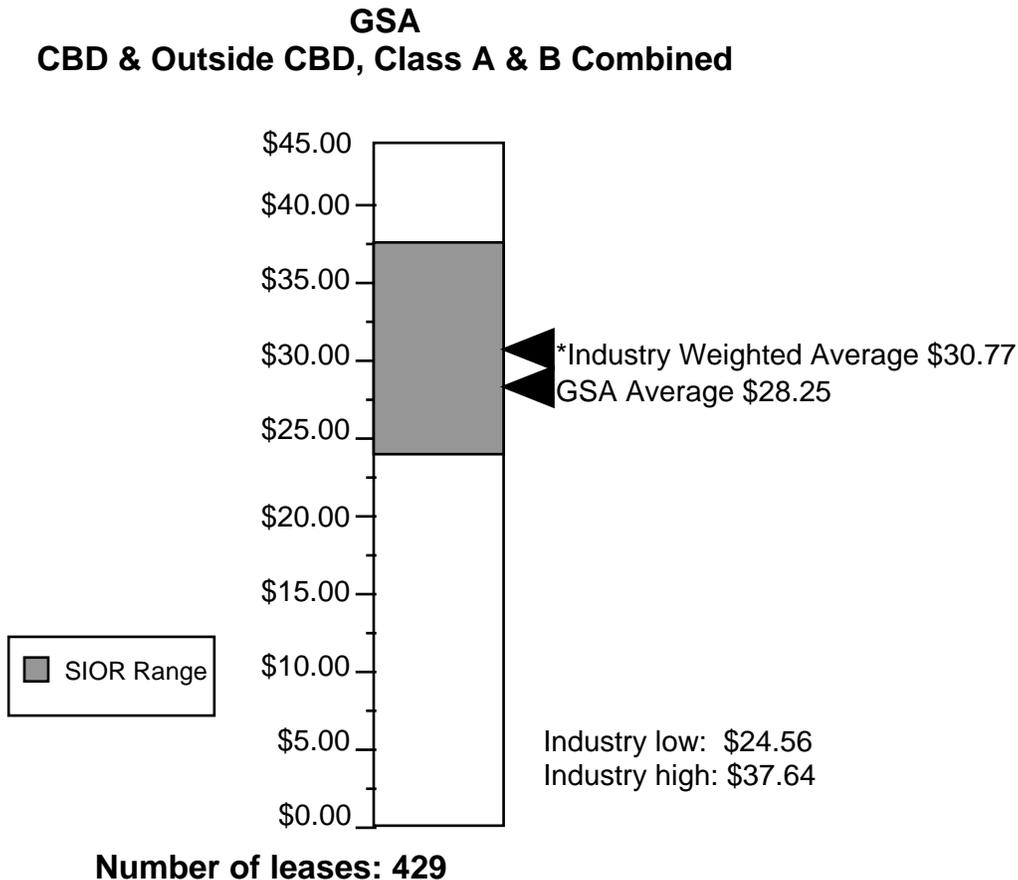
The key benchmark used in the private sector to gauge leasing costs is the measure of lease rates(?) per rentable square foot by building location and condition (to account for building age and quality). PBS focuses exclusively on full-service rents for office space and uses an interactive website tool to assess leasing performance. The tool compares and analyzes PBS lease actions to market-specific benchmarks as reported by the Society of Industrial and Office Realtors (SIOR), a primary source of accurate, up to date data about private sector lease rates. SIOR obtains data from brokers, lenders, and other specialists in the local markets. SIOR’s report contains lease rates per rentable square

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foot by location and by building classification, defined by SIOR as follows: Within CBD, Outside CBD, Class A, and Class B.

To calculate the measure for each building class/ location breakout, PBS compares the average costs of PBS leased space to the midpoint of the high and low of published industry rates, weighing each lease by square footage. Based on these results, a cost above or below industry is determined. This analysis allows PBS to understand the impact of each transaction in terms of square footage and its dollar value.

### FY 2006 Statistics



\* Assumes Average Industry cost for additional market data = High+Low/2

PBS' benchmark data is used by real estate associates within PBS to achieve the best value for its customers. External stakeholders, including Congress and the Office of Management and Budget (OMB), also use this information to ensure PBS rates stay competitive with the market. By regularly benchmarking their asset performance to the private sector, PBS develops a high performance workplace which continually strives to improve the management of their portfolio.

Source: [PBS Linking Budget to Performance Website](#)

**PRINCIPLE #3**

**EMPLOY LIFE-CYCLE COST-BENEFIT ANALYSES**

OMB Circular No. A-94 requires Federal agencies to justify asset management and acquisition decisions using life-cycle cost-benefit analyses. Life-cycle cost analysis (LCCA) is a method of assessing the overall costs of project alternatives. It is used to select the design that will provide the lowest overall costs of a facility’s ownership consistent with its quality and function.

LCCA accounts for initial (capital) and recurring costs (maintenance, refurbishment, and operations) and residual asset value upon decommissioning or disposal. LCCA is well suited for evaluating design alternatives that satisfy a required level of building performance, but may have different initial investment, operation, maintenance, and/or repair costs, and possibly different useful lives.

LCCA is especially useful when project alternatives that fulfill the same performance requirements—but differ with respect to initial and operating costs—have to be compared to select the one that maximizes net savings. For example, LCCA will help determine whether the incorporation of a high-performance heating, ventilating and air conditioning or glazing system, which may increase the initial cost but result in reduced operating and maintenance costs, is cost-effective or not. These analyses help agencies make improved real property investment decisions.

Sustainable design and development, defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs, represents the simplest model for comprehensive life-cycle costing. It offers the longest view of direct and possible side effects of investment decisions.

LCCA should be applied within a life-cycle assessment framework that accounts for both the costs over the asset life and the environmental consequences of investment decisions on upstream (e.g., extraction, production, transportation, and construction), ongoing (e.g., health impacts on tenants and the community), and downstream (e.g., decommissioning and disposal) costs.

**Case Study: Office of the Architect of the Capitol Integrates Facility Condition Assessments, Master Plans, and Capital Improvements Programming**

The Office of the Architect of the Capitol (AOC) is responsible for maintaining nearly 15 million square feet of space on 400 acres of land. Until 2003, data on AOC facilities was classified by inconsistent definitions and inadequate cataloguing, and did not reflect current AOC facility condition information. The AOC’s last comprehensive master plan for the Capitol Complex had been completed in 1981; therefore, the plan was outdated and could not be used as a reliable source when making contemporary facility or budgeting decisions. As a result of AOC’s inadequate and outdated facility data,

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Congress did not have a clear vision of the AOC's long-range capital requirements and priorities.

In 2003, the AOC initiated a transformation of the Capital Complex facilities management approach from an anecdotal to an updated data-driven system. The updated system, aimed to link the budgeting process to the Capitol Complex Master Plan (CCMP), includes an updated Master Plan, a modern Capital Improvements Program, and extensive Facilities Condition Assessments (FCAs).

As the foundation of the CCMP, FCAs establish an ongoing process for monitoring facility conditions and enables the AOC to develop a comprehensive plan for facility maintenance and building renewal. Under the CCMP, the AOC will annually assess its facilities, resulting in the establishment of a complete asset inventory. The AOC will also create and track facility condition benchmarks for internal jurisdictional comparisons and external comparisons with similar institutions.



The U.S. Capitol Complex is comprised of the Capitol, the House and Senate Office Buildings, the U.S. Botanic Garden, the Capitol Grounds, the Library of Congress buildings, the Supreme Court building, the Capitol Power Plant, and several support facilities.

*Photo courtesy of the Architect of the Capitol.*

The integration of data-driven sources into an updated system has led to AOC's increased confidence in its capital project information as it moves through the Congressional appropriations process. AOC's use of its updated system has produced objective, defensible budget requests that help ensure continuity, anticipation of life-cycle facilities requirements, and adequate lead time for financial planning. During the development of its fiscal year (FY) 2008 budget, AOC relied on data taken from FCAs to prioritize and rank its capital program request.

**Source: 2007 GSA Achievement Award for Real Property Innovation Entry  
"Integration of Facility Condition Assessments, Master Plans, and Capital  
Improvements Programming"**

**PRINCIPLE #4**

**PROMOTE FULL AND APPROPRIATE UTILIZATION**

The Federal Government is responsible for fully and effectively using its real property assets to their maximum capacity during their useful economic life (determined by using the Government’s financial accounting standards).<sup>2</sup> Moreover, Federal agencies should use space for the purpose for which it was intended (e.g., office space should not be used for storage/warehouse purposes).

When planning and continually evaluating space needs, agencies should explore alternatives that meet the goals of EO 13327 and other Federal laws concerning agency location.<sup>3</sup> Such alternatives include adapting, supplementing, or consolidating into existing historic facilities that can be cost-effectively upgraded and operated, including underutilized properties available from other Government agencies. Converting and upgrading existing assets are viable alternatives to constructing new buildings, especially given the limited availability of new construction funding.

Holding onto assets that no longer support the agency’s mission represents mismanagement of Federal resources. To help agencies monitor an asset’s utilization, the FRPC established a utilization rate performance metric in the Federal Real Property Profile (FRPP).

OMB Circular No. A-11 requires agencies to determine the usefulness of an asset and identify assets suitable for disposal. Real property holding agencies must continuously analyze their space needs. If a property is no longer needed, the agency should take steps toward removing that asset from the agency’s inventory, rather than retaining the asset for an undetermined future need.<sup>4</sup>

**Case Study: Department of the Army Creatively—and Effectively—Utilizes a Mission-Critical Asset**

Founded in 1952 as the Army’s Desert/Hot Weather climatic test site, the Yuma Proving Grounds (YPG) in Arizona has evolved into the Department of Defense (DOD) Reliance Lead for the hot weather testing of vehicles. The YPG area has the longest, hottest summer test season in the U.S., with more than 100 days in temperatures in excess of 100 degrees.

YPG has become even more mission-critical in the recent years, as increased over-the-road speeds have become a key defense in current and potential military operation environments worldwide. However, YPG as an asset has not been able to fulfill evolving,

<sup>2</sup> The useful life of an asset is primarily related to its economic value and not its physical life. Elements affecting an asset’s useful life: 1) physical deterioration; 2) functional obsolescence; 3) technological obsolescence; and 4) economic obsolescence. For additional information, agencies should consult with the agency’s Chief Financial Officer.

<sup>3</sup> Other Federal laws and EOs include the Rural Development Act of 1972, as amended, EO 13006 “locating Federal Facilities on Historic Properties in our Nation’s Central Cities,” and EO 12072 “Federal Space Management.”

<sup>4</sup> For additional information on assessing utilization, contact your agency’s Senior Real Property Officer.

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more sophisticated testing needs – its only paved test course is a single straightaway constructed in the 1950s, appropriate only for low-speed testing.

Seeking to upgrade the asset and subsequently meet mission-critical needs, the Army decided to apply their Enhanced Use Leasing (EUL) authority in the effort to utilize the asset to its fullest. The EUL program provides an opportunity for the Army to capitalize on non-excess real property assets by leasing these assets to private entities. As a result, the Army avoids infrastructure costs, accepts a variety of facilities and services as in-kind considerations, and collects cash rent to fund other Army real property requirements

The Army released a competitive Notice of Opportunity to Lease (NOL) to collaborate with a private sector organization for the creation of a world-class hot weather test complex at YPG. The General Motors Corporation (GM) was selected, and signed an EUL for a 50-year lease term with two renewable options of 25 years each. Prior to signing the EUL, GM had already maintained a hot weather test complex outside of Phoenix for its vehicles since 1953 but decided to relocate due to rapid urbanization, encroachment, and high property values. Both the Army and GM will benefit greatly from the EUL at YPG – both GM and the Army will be able to test their vehicles on the new site and upon conclusion of the lease, the facilities built within the EUL will revert to the Army.



Through the Army's enhanced use lease with General Motors, the Yuma Proving Grounds facility—the Department of Defense's Reliance Lead for hot weather testing of vehicles—will be more effectively utilized.

*Photo courtesy of the Department of the Army*

Construction of a new world-class hot weather testing facility would have cost the Army millions of dollars, but through the EUL, the YPG project is funded by private dollars and costs taxpayers nothing. When finalized, the YPG site will include new facilities valued at over \$100 million, including a new high speed oval track, two parallel paved straightaway tracks to simulate freeway driving, a ride and hauling course that consists of various road surfaces and terrain conditions, a large skid pad for braking, and both administrative and vehicle maintenance buildings. GM is also providing additional funds to construct separate automotive test facilities for Army-unique needs.

The EUL at YPG is a prime example of efficient and economical use of a Federal real property asset through the careful consideration of an agency's utilization of its resources and creative joint use. Through the EUL, Federal land, infrastructure, and facilities will be more fully utilized and created needed facilities that benefit the Army, the taxpayer, and the national economy.

**Source: 2007 GSA Achievement Award for Real Property Innovation Entry "Department of Army Enhanced Use Leasing Program and Case Study – Yuma Proving Grounds, AZ"**

**PRINCIPLE #5**

**DISPOSE OF UNNEEDED ASSETS**

An asset should be designed as surplus property—and redeployed, demolished, or replaced—when it no longer meets a Federal need. The decision to dispose of an asset is best made when it is based on an in-depth strategic portfolio review. This approach includes assessing market availability, supply and demand, property performance, physical conditions, future mission needs, and prospective housing profiles.

Retaining ownership of underutilized or unneeded properties results in:

- Lost equity value, while not contributing to the Government’s mission or strategic goals.
- Negative impact on local economies, tax revenues, and employment.
- Increased operating costs.
- Drain on limited agency resources.
- Ineffective property stewardship for the Federal real property portfolio.

The most common options for asset disposition, depending on agency specific authorities, include:

- Transferring the asset to another Federal agency.
- Exchanging it for another mission-related property.
- Outleasing to non-Federal organizations.
- Making property available for public benefit conveyances.
- Selling or leasing the property to generate revenue for the Federal Government.

Selection of the disposition option should be based on an economic analysis of the alternatives. If the transaction is handled properly, it will result in a smooth transition of ownership and produce a return to the Government that is in the best interest of the taxpayers.

**Case Study: Real Property Asset Listing Portal Transforming the Way Federal Agencies Dispose of Excess Federal Assets**

In 2001, the President’s Management Council adopted 24 electronic government initiatives to improve the quality of service for citizens and businesses. Among them, the Federal Asset Sales (FAS) initiative was introduced as a way to improve the way Federal agencies dispose of excess Federal assets. The scope of the FAS initiative was expanded

EO 13327 is intended to reduce the number of unneeded Federal assets. An asset that has no potential use by any Federal agency should be designated as “surplus property” and appropriately disposed of in accordance with Federal statutes.

Agencies should consider outleasing space in historic properties to non-Federal entities under Section 111 of the National Historic Preservation Act. Section 111 enables private reinvestment and re-use of Federal historic buildings while the Government holds title to the property.

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in 2006 to include Real Property. In response, a team comprised of members from the General Services Administration (GSA) Public Buildings Service (PBS), the Department of Agriculture (USDA), and the Department of Housing and Urban Development (HUD), worked to develop the Real Property Asset Listing Portal, a web-based portal that allows any Federal agency to advertise—in one place—all of its surplus, forfeited, and foreclosed property available for sale. The portal is a component of the FedAssetSales E-Gov Initiative, an overarching program designed to improve and optimize the way the Federal government disposes of its assets.

Information that was once spread out over 100 Federal web sites is now located in the one-stop shop of the Real Property Asset Listing Portal, which ultimately links all agencies with real property disposal authority. Implementing a single location where the vast majority of surplus government real property is advertised for sale leads to a more effective advertisement, more bidders, and more competition – not to mention higher auction prices for the thousands of foreclosed and forfeited houses and farms, and surplus government land and buildings, which are sold each year.

The portal has changed the way the entire government sells real property. Before the portal was launched, each agency with real property disposal authority was responsible for advertising its surplus, foreclosed, and forfeited property that was available for sale. Each agency had its own staff, its own process, and its own performance measures for meeting this task. As a result, the process variance between agencies was staggering and the cost to taxpayers significant. With the Real Property Asset Listing Portal, there is now one simplified process, as well as consistent performance measures, for all real property disposal agencies – which lead to greater awareness of sales/sales attendance, higher bids and sales prices, and more efficient use of taxpayer dollars.

Approximately 90,000 houses, 200 farms, and \$1 billion in buildings and land are advertised annually on the portal. Currently, all 26 scorecard agencies participate in the portal and there have been discussions on including state and local governments. The portal simplifies and streamlines how citizens learn about and buy surplus government property. The more exposure citizens have to surplus real property, the greater the likelihood of increased sales of unneeded Federal assets.

Insert Screenshot: <http://www.govsales.gov/html/index.htm>

**Source: 2007 GSA Achievement Award for Real Property Innovation Entry “Real Property Asset Listing Portal”**

**PRINCIPLE #6**

**PROVIDE APPROPRIATE LEVELS OF INVESTMENT**

The Federal Government is accountable for providing appropriate asset investment, which includes determining the costs and benefits of the investment and how the assets are designed, constructed, maintained, managed, protected, and disposed. Ultimately, the Government must effectively manage its global property portfolio – consisting of \$1.5 trillion (plant replacement value) in assets to obtain optimal use and efficiency.

There is a high level of deterioration in existing Federal assets, which has significant financial implications. GAO estimates the repair backlog to be in the range of tens of billions of dollars.

Effective portfolio management requires agencies to continuously analyze investment decisions, such as whether to construct, alter, repair, and/or acquire workspace to meet changing mission needs. Decisions for major investments should be based on an investment framework consisting of financial analyses, valuation criteria, and other required information to determine the proper level of investment. The Capital Programming Guide, Supplement to Part 3 of OMB Circular No. A-11, provides guidance for employing a disciplined capital programming process and focusing on key principles, such as: thorough planning, risk management, full funding, portfolio analysis, performance-based acquisition management, accountability for meeting goals, and cost-effective life-cycle management.<sup>5</sup>

Reinvestment projects are major renovation or reconstruction activities necessary to keep existing facilities modern and relevant in an environment of changing standards and missions. Reinvestment extends the service life of facilities or restores lost service life.

Agencies are encouraged to modernize and maintain real property so that it continues to support the Government’s mission. Appropriate reinvestment:

- Provides healthy and safe workplaces.
- Increases the asset’s desirability and fair market value.
- Supports advancing business practices and technologies.
- Enhances hiring, retention, morale, and productivity of associates.

An agency can also reinvest in existing high-value assets by supplementing them with new construction instead of completely replacing them. This type of investment increases the Government’s equity in high-value assets.

<sup>5</sup> To view the Capital Programming Guide, go to [www.whitehouse.gov/omb/circulars/a11/cpgtoc.html](http://www.whitehouse.gov/omb/circulars/a11/cpgtoc.html).

## Case Study: Lawrence Berkeley National Laboratory Prioritizes Capital Investment Decisions Through Integrated Facilities Assessment System

Managed by the University of California and overseen/funded by the U.S. Department of Energy (DOE), the Lawrence Berkeley National Laboratory is one of the leading government-sponsored research centers in the country. The laboratory complex consists of 107 buildings on 203 acres.

The DOE requires all national laboratories under its custody to meet its standards for the programming, budgeting, operation, maintenance, and disposal of real property. Each national laboratory must also report on facility condition and value, which is then included in DOE's Facility Information Management System that supports the department's facility planning, budgeting, and execution decisions.

Prior to 2006, Berkeley used several systems, including spreadsheets and databases, to maintain facility and infrastructure condition information, which was

used to generate reports for DOE. While the use of separate systems allowed Berkeley to meet DOE's basic reporting requirements, it did not allow Berkeley to run cost modeling, nor successfully integrate with the software system Berkeley used to manage the execution of facilities projects.



Founded in 1931, the Lawrence Berkeley National Laboratory is the oldest of the Department of Energy's National Laboratories. The lab operates on an annual budget of more than \$500 million (FY 2004).

*Photo courtesy of the Lawrence Berkeley National Laboratory*

Seeking a more integrated, sophisticated approach to maintaining facility information, Berkeley implemented a comprehensive facilities assessment, analysis, planning, work execution, and reporting system. The new system not only incorporates consistent facility condition assessments with DOE reporting requirements, but also allows Berkeley to develop cost models, view life-cycle information, and prioritize projects. In addition, the system automatically updates condition information upon the completion of maintenance and renewal projects, including updates on actual costs and indices.

DOE also requires that each national laboratory allocate 2% of its replacement value to ongoing maintenance costs. The new system allows Berkeley to generate more accurate replacement values, replacing its previous method of estimating replacement value based on insurance policy values.

Berkeley's comprehensive facilities assessment system not only supports its DOE reporting compliance, but has also facilitated Berkeley's five-year sustainment plan and

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life-cycle renewal forecasting for its ten-year site plan. Berkeley's system has been recognized by the DOE as a best practice integrated facilities management solution. Berkeley's data collection leads to the ability to make informed investment decisions in the allocation and prioritization of dollars, as well as demonstrate effective portfolio management as a whole.

**Source: Berkeley Web site ([www.lbl.gov](http://www.lbl.gov)) and 2006 VFA Case Study, "Integrated Facilities Condition Management at Lawrence Berkeley National Laboratory"**

**PRINCIPLE #7**

**ACCURATELY INVENTORY AND DESCRIBE ALL ASSETS**

Real property holding agencies must develop and maintain inventory-tracking systems to assist in managing their asset portfolios. The collection of reliable, uniform data enables agency decision makers to:

- Improve asset management.
- Provide data to aid in timely and informed portfolio management decisions.
- Respond to inquiries from Congress, the Administration, stakeholders, and the private sector.

**Case Study: U.S. Department of Agriculture's Corporate Property Automated Information System (CPAIS) Program Improves Inventory Accuracy**

The U.S. Department of Agriculture's (USDA) focus on improving asset management accountability illustrates a real property transformation that benefits not only USDA, but the Federal real property community as a whole. To improve its inventory accountability, USDA implemented a department-wide real property automated information system, coined the Corporate Property Automated Information System (CPAIS). CPAIS is a fundamental and critical corporate system that allows USDA to manage its entire portfolio for the first time in USDA history.

As one of the largest Federal landholders, an accurate inventory and description of its real property assets is vital to USDA's real property management. As of March 2007, USDA's inventory consisted of approximately 193 million acres of land, as well as approximately 27,000 owned buildings and 31,000 owned structures.

CPAIS provides an integrated solution to inventory management by standardizing USDA real property accounting, real property business process, and management of the entire real property portfolio, including real property, commercial leases, and General Services Administration (GSA) assignments. USDA also uses CPAIS as the primary tool in tracking capital and operating leases, as well as reviewing the status of current leases and renewal dates. As a single and descriptive database of USDA's real property assets, CPAIS gives USDA the capability to manage assets at both a corporate and agency level and collects all data required by Federal Real Property Council (FRPC) directives.

As USDA's primary inventory reporting and portfolio management tool for its entire real property portfolio, CPAIS both meets and exceeds FRPC requirements, including:

- Tracking specific data elements, including all 24 FRPC data elements, necessary to meet external mandatory requirements and ad hoc query requirements.
- Maintaining data elements required to calculate Total Capitalization Value and Total Accumulated Depreciation of USDA-owned property.

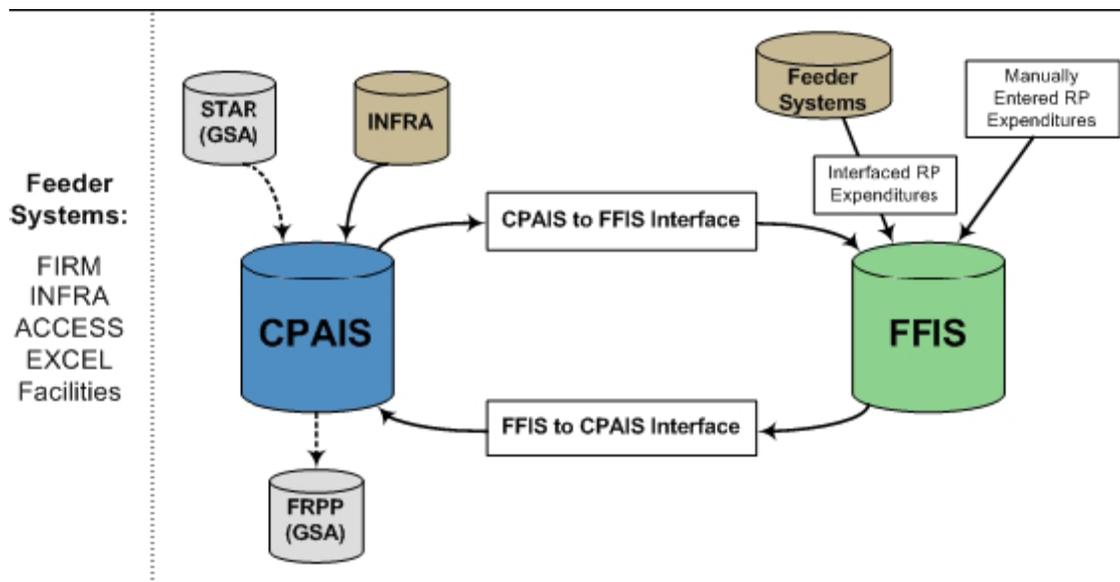
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- Collecting and managing data related to purchase cost and Work in Progress (WIP) accounting.
- Tracking condition ratings.
- Generating depreciation expense transactions.
- Tracking the breakdown of total costs distributed by service agencies in collocated locations.

USDA is just one of the 29 Federal agencies that successfully reported inventory and performance data on more than 1.2 million assets in FY 2006. Agency data is collected and reported to a single, centralized descriptive database of all real property managed by executive branch agencies – this database is known as the Federal Real Property Profile (FRPP). GSA has been collecting governmentwide real property inventory data and producing a summary report for Congress since 1955 – but after the signing of EO 13327 in 2004, the FRPP was enhanced to satisfy EO requirements.

Such as USDA implemented CPAIS to improve its inventory accountability, the improved asset level reporting from FY 2005 to FY 2006 is the direct result of agency efforts to capture and report accurate inventory and performance data for each constructed asset.

**Source: USDA FY 2007 Asset Management Plan / USDA Web site**



The above diagram depicts the CPAIS and the systems with which it interfaces. The real property data within the feeder systems (to the left) are converted for use in CPAIS. CPAIS interfaces with the Foundation Financial Information System (FFIS), which tracks all recorded transactions, as well as the GSA STAR billing website. **CPAIS electronically forwards the Federal Real Property Profile (FRPP) data to GSA.**

*Photo courtesy of the U.S. Department of Agriculture (FY 2007 Asset Management Plan)*

**PRINCIPLE #8**

**EMPLOY BALANCED PERFORMANCE MEASURES**

The FRPC promotes the use of balanced performance measures and management techniques to monitor and evaluate asset efficiency regularly. The FRPC identifies and defines performance measures the Federal agencies are required to collect and report to GSA’s governmentwide inventory system. The results of these performance measures assist Federal agencies in determining the effectiveness of their asset management decisions. The FRPC has defined four “First Tier” performance measures:<sup>6</sup>

1. Utilization
2. Condition Index
3. Mission Dependency
4. Annual Operating Costs

The FRPC continues to evaluate additional performance measures that may be included in the inventory reporting system in the future.

Performance measures are specific data definitions that enable agencies to track their progress toward achieving management objectives. Performance measures provide vital management information through the life of an asset, providing senior management with a reliable monitoring system.

In addition to these governmentwide performance measures, many agencies currently maintain and track their own agency-specific performance measures.

**Case Study: GSA PBS’s Linking Budget to Performance (LB2P) Program Uses Scorecard Measures to Reward Good Performance**

Since its 1998 rollout, the General Services Administration’s (GSA) Public Buildings Service (PBS) Linking Budget to Performance (LB2P) program has successfully linked its budget to performance measurement goals. PBS sets annual targets for each of the nine performance measures for each of its 11 regional office to achieve. Annual targets are based on PBS national goals and the regional baseline measurement from historic data. Each regional office then works to achieve the performance measure targets and receives budgetary allocation in each of the categories based on its ability to exceed or meet the targets. Regional offices that exceeded the national performance goal for each of the measures receive a bonus pool of money.

Referred to as the “Big Nine,” the LB2P performance measures include:

- Funds from operations
- Customer satisfaction
- Impact of non-revenue producing space
- Lease costs

<sup>6</sup> For additional information on the “First Tier” performance measures, contact your agency’s Senior Real Property Officer.

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- Maintenance costs
- Cleaning costs
- Construction costs within budget
- Construction costs within schedule
- Indirect costs as a percent of revenue

LB2P encourages creative and innovative thinking while improving PBS performance and customer service. Each PBS region has demonstrated improved results since the implementation of the program. In both 1999 and 2000, PBS received a Global Innovators Award from the International Development Research Council (now CoreNet Global), which recognizes the successful application of new ideas to corporate real estate and workplace management.

Instituted as a way for PBS to focus on providing the best service for its customers while achieving the maximum return on investment, LB2P has led to significant revenue increases, cost savings, and cost avoidance.

**Source: PBS Web site**

High-performance workplaces are those that meet agency business needs, are best suited to their employees' work functions, and are readily adapted to accommodate new work practices and strategies with minimal expense and delay.

**PRINCIPLE #9**

**ADVANCE CUSTOMER SATISFACTION**

To advance customer satisfaction, agencies need to assess their customer relationships holistically by:

- Focusing on a tenant's mission.
- Proactively monitoring changing space.
- Providing a productive workplace.

Customer satisfaction is increased when agencies work collaboratively with their tenants to define specific requirements, integrate these requirements into asset management decisions, and transform decisions into innovative and responsive workplaces. Agencies should continually strive to improve tenant relations and advance customer satisfaction.

As part of these efforts, agencies are encouraged to develop high-performance workplaces and alternative workplace strategies tailored to the tenant's needs.

**Case Study: GSA's Lease Administration and Management Program Leads to Improved Customer Satisfaction Scores**

The General Services Administration (GSA) Northeast and Caribbean region developed the web-based Lease Administration and Management system as a way to efficiently document its lease inspections and track tenant concerns and lessor performance. Currently including more than 700 tracked leases and 8,000 documented lease inspections, the tool has enabled GSA to focus its efforts in addressing tenant concerns by tracking lessor performance and identifying patterns in tenant issues – ultimately resulting in improved customer satisfaction scores.

The Lease Administration and Management system is designed to be both a repository of critical information and a tool for tracking lease deficiencies. GSA's ultimate goal in using the system is to improve customer satisfaction scores in leased locations. Using the tool, GSA associates can input any customer complaints by location in a chronological order, as well as the specific actions taken to rectify any problems.

Prior to the tool's implementation, vital lease data was not centrally maintained; lease inspections were either not being documented or being recorded on paper. Without the lease data, GSA was at a disadvantage in working to remedy customer problems and issues. With the Lease Administration and Management program, any GSA regional associate can easily document and access lease inspection data. Each inspection is time-stamped and remains open until a GSA associate enters a resolution date for any outstanding issues. Associates can track reports with outstanding issues by building, agency, office, or service district.

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The program also features a unique capability in which any associate can run reports showing all leases with customer satisfaction scores below a given level. Account managers can use the program data to negotiate lease extensions and renewals. When a tenant has a question about an asset or location, any associate can respond. In addition, each associate can run his or her own lease reports, which has eliminated the need for each office to compile data individually and then have the entire GSA region assimilate the data into one report.

Within one year of the program's implementation, The Northeast Caribbean Region's customer satisfaction scores have increased from the mid 50s to the low 90s. Customer satisfaction scores in lease locations have also increased, which is reflected in standard customer surveys and ordering official surveys. GSA is currently planning a national rollout of the program, which is scheduled for a fiscal year (FY) 2008 completion.

**Source: 2007 GSA Achievement Award for Real Property Innovation Entry "Lease Administration/Overtime Utility"**

**PRINCIPLE #10**

**PROVIDE FOR SAFE, SECURE, AND HEALTHY WORKPLACES**

Effective management of Federal facilities requires that buildings provide safe, secure, and healthy working environments that support a productive workforce. Implementing standard policies and procedures and developing action plans to monitor and maintain workplaces complement the development of, and are basic requirements for, robust asset management strategies. These policies include:

- Minimizing environmental problems and liabilities.
- Complying with building security, fire, and life-safety codes and standards.
- Meeting historic building and Americans with Disabilities Act requirements.

The highest priority for real property holding agencies is to protect their most important assets – their employees.

In today's world, agencies are developing concepts to promote safe, secure, and healthy workplaces that go beyond simple compliance. Referring to principles established by President John F. Kennedy in 1962 in the *Guiding Principles for Federal Architecture*, agencies are designing Government facilities that are not only “efficient and economical,” but also contemporary architectural expressions of the “dignity, enterprise, vigor, and stability of the American Government.” As this ideal has matured, the goal has been to establish a definition of excellence that makes safe, secure, and healthy workplaces integral aspects of Federal building projects.

**Case Study: Sustainable Features an Integral Component of U.S. Environmental Protection Agency Potomac Yard Facility**

The U.S. Environmental Protection Agency (EPA), working in partnership with the General Services Administration (GSA), is leasing a speculative facility in Arlington, Virginia. The buildings, known as One Potomac Yard and Two Potomac Yard, comprise a total of 654,000 square feet of office and retail space, located on a formerly abandoned railroad yard. EPA included environmental provisions as part of its competitive Solicitation for Offers (SFO) for the space, citing energy and water efficiency, as well as environmentally preferable materials and design, as mandatory elements of the facility's design and construction.

After construction was completed in July 2006, the facility achieved the U.S. Green Building Council's Leadership in Environment and Energy Design (LEED) Gold-level certification for sustainability. One and Two Potomac Yard's sustainability features include:

- Energy and water conservation.
- Site selection to minimize impacts on surrounding environment.
- Proximity to alternative transportation.

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- Responsible stormwater management.
- Water reduction.
- Recycling.
- Use of green building materials.
- Improved indoor air quality through the use of low volatile organic compound products and careful ventilation practices during construction and renovation.
- Green roof to reduce urban heat island effect.

EPA worked closely with a team of experienced professionals to develop the building designs. The team included an environmental building consultant and commissioning authority to educate the design team about sustainable design. EPA's developer created a quality control program, including frequent field inspections and regular meetings with various stakeholders, to enforce the implementation of sustainable requirements.

By working as a team and keeping each stakeholder informed, the Potomac Yard facility was able to achieve LEED Gold-level certification and maintain reasonable costs and schedules. As a result, One and Two Potomac Yard exemplify a balance of function, cost, security, and sustainability – enabling EPA employees to occupy a facility that features environmental attributes, saves money, and contributes to a safer, healthier, and more productive work environment.

**Source: EPA Web site, 2006 GSA Achievement Award for Real Property Innovation Entry “Property Innovation at EPA’s New Arlington, Virginia Offices: Reaching for “Green,” Achieving Gold in a Speculative Building”**

**PRINCIPLE #10 (OPTION 2)**

**PROVIDE FOR SAFE, SECURE, AND HEALTHY WORKPLACES**

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**Case Study: Green Building Improves Workplace Performance and Customer Service at the Chesapeake Bay Foundation**

The Chesapeake Bay Foundation's (CBF) mission and vision is centered on restoring and preserving the health of the Chesapeake Bay, an environmental cause tied to minimizing pollution and other negative human impacts on the surrounding region. Consequently, providing a building that features employee office space with minimal environmental impacts on the Chesapeake Bay helps the foundation “walk the talk” and gives tenants a sense of living out the CBF cause.

According to the foundation's Web site, “The Philip Merrill Environmental Center *is* the Chesapeake Bay Foundation. In design, construction, and operation, the center—which serves as CBF's headquarters—reflects our mission to protect and restore the bay.” A post-occupancy survey conducted by the Pacific Northwest National Laboratory noted that the single most striking finding was the strong agreement among staff on how well the Merrill Center building conveys the mission and values of the organization.<sup>7</sup>

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<sup>7</sup> To access *The Philip Merrill Environmental Center Post-Occupancy Evaluation*, visit [http://www.cbe.berkeley.edu/research/pdf\\_files/SR\\_CBF\\_2005.pdf](http://www.cbe.berkeley.edu/research/pdf_files/SR_CBF_2005.pdf).

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Notable features of the Merrill Center include:

- **Sustainable Building Design.** As the first building to earn the U.S. Green Building Council’s Leadership in Energy and Environmental Design® (LEED) Platinum certification, the CBF headquarters building is recognized as one of the “greenest” buildings every constructed.<sup>8</sup>
- **Location.** With views of the Chesapeake Bay and Black Walnut Creek, the Merrill Center is located in the exact environment employees are striving to save. The location also satisfied Maryland’s Smart Growth criteria, making it a sustainable site and further connecting the tenants with their mission.
- **Tenant Pride.** Occupants have a strong sense of pride in the building, made evident by the fact that 97 percent of respondents to a survey given by the Center for the Built Environment (CBT) at the University of California at Berkeley’s Occupant Indoor Environmental Quality said they were proud to show the office to visitors.



The 32,000-square-foot Merrill Center houses the Chesapeake Bay Foundation, which works to reduce pollution, restore habitat, and replenish fish stocks in the Chesapeake Bay.

*Photo courtesy of the Chesapeake Bay Foundation*

Prior to moving into the Merrill Center, CBF staff worked in several, separate buildings spread throughout Annapolis; the construction of the Merrill Center

allows employees to collaborate more efficiently under one roof. While designing the new building, CBF sought to create a working space that supports effective group communication, community, and well-being through the following features:

- **Alternative Transportation.** The Merrill Center offers facilities such as bike racks, showers, and changing rooms that enable employees to walk, bike, or kayak to work.
- **Videoconferencing/telecommuting capabilities.** CBF equipped its headquarters for videoconferencing and telecommuting, which decreases the staff’s need to travel—advancing the foundation’s goal to minimize carbon emissions associated

<sup>8</sup> For the LEED Case Study on the Merrill Center, visit <http://leedcasestudies.usgbc.org/overview.cfm?ProjectID=69>.

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with traditional modes of transportation—and accommodates alternative workplace schedules.

- **Open Floor Plan.** The Merrill Center features an open floor plan, meaning that workspaces do not have doors and passersby can see the surrounding natural landscape from nearly all points in the building. The post-occupancy survey given by the Pacific Northwest National Laboratory reports that most of the staff found the design, although sometimes noisy, increases a sense of connection to others and the potential for impromptu conversations, which can lead to more effective communication.

The Merrill Center building not only embodies CBF's mission, but also helps recruit and retain employees. With its integration of green design elements, views of the bay, and staff-friendly features, the Merrill Center provides its employees with a high-performance environment – which leads to increased productivity and employee dedication to CBF's cause.

**Source: Chesapeake Bay Foundation Web site ([www.cbf.org](http://www.cbf.org))**