PRACTICUM RESEARCH PROJECT

Evaluation of Alternative Federal Real Property Acquisition Approaches

Masters of Science in Real Estate

PATRICK G. FINDLAY  MSRE Candidate  ROGER STAIGER  Faculty Advisor
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RESEARCH PROJECT

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1. Project Goals:
   a. Identify alternative methods that the U.S. Federal government could utilize to acquire real property, specifically relating to office space.
   b. Analyze and compare alternative acquisition methods.
   d. Make conclusions regarding financial modeling, acquisition methods and authorities.

2. Statement of the Problem. Given the Federal budget deficit and need to reduce Federal expenditures, the traditional methods that the government has used for acquiring space, using direct federal appropriations to construct or purchase buildings, is not likely to be feasible, at least in the near term. The large amount of leasing that the Federal government now uses does not result in Federal ownership and may be more expensive for meeting long term requirements.

3. Questions/Issues to be Addressed. Although initially the problem was focused on acquisition of real property for the federal government, it rapidly became clear that both acquisition and management needed to be considered to have a proper analysis. After initial research and interviews, the analysis was further focused and was directed to answer the following questions:
a. First, what are the primary federal agencies which acquire and manage buildings in the United States?
b. Second, what authorities affect Federal real property acquisition and management?
c. Third, what are alternative means available to these federal government agencies to acquire and manage real property?
d. Fourth, after accomplishing financial modeling of a sample project, analyze the different acquisition alternatives. Compare the alternatives and make recommendations regarding acquisition approach. Which acquisition approach provides the lowest costs to the taxpayer?
e. Fifth, what conclusions were reached regarding acquisition of real property for the Federal Government?

4. **Problem Significance.** Federal agencies own or lease approximately 3.3 billion square feet of facilities worldwide, with 23%, 728 million square feet, of office space. Much of that space is in aging facilities that may well not meet the needs of the Federal agency tenants. As the Federal workforce is expected to be downsized and Federal office space needs will reduce due to budgetary pressures, the current Federal office space portfolio will need to change.
   a. Some government leaders believe that all permanent Federal office space needs should be met in owned (versus leased) facilities. However the current method that the Federal government uses to acquire owned facilities is through outright purchase or construction using direct Federal appropriations, i.e. “in cash”.
   b. Unfortunately the funding available for new space/facilities acquisitions (through direct purchase or construction) has been limited and is expected to be much more limited in the future. Direct purchase or construction with all funding required
“up-front” results in a funding “spike” for a Federal agency. It is nearly impossible for the Congress and Federal agencies to provide the needed funds in a single year, from constrained agency budgets. As will be partially discussed, the only notable exceptions are the recurring major construction programs in the Defense Department (the Military Construction or “MILCON” appropriation) or in the State Department (the NEC program).

c. Instead Federal agencies lease space. This approach does not result in any benefits of ownership for the Federal agencies or the taxpayer. As a result, the amount of leasing by the Federal government has grown steadily over the last decade. The Federal government currently leases 634.5 million square feet of space (as of fiscal year 2009). The bulk of that space is leased by the General Services Administration (GSA), which is the primary real estate agent for most Federal agencies. GSA leases more than 8,000 assets and now leases more space than it owns, with a current annual rent bill of approximately $8 billion.

d. This extensive leasing is often driven, not by choice and informed decision, but because it is the only option available. If a need exists which existing facilities cannot meet, and there is insufficient funding for purchase/construction, leasing is the only option for a Federal agency.

5. **Introduction to Federal Real Property Acquisition/Management**: The objective of this study is to evaluate federal government practices regarding real property acquisition/management. And although multiple federal agencies hold large amounts of land, such as the National Park Service, the U.S. Forest Service, Bureau of Land Management, etc., this study will only consider real property management as it relates to buildings (potentially
including the costs of land on which they are built), and considering domestic practices. The three Federal Agencies with the largest amount of building space are the Defense Department, the Department of Veterans’ Affairs, and the General Services Administration. Each of these three agencies has different authorities and approaches to real property which are discussed in turn below.

a. **The Defense Department.**

(1) The Defense Department has by far the largest amount of building space and number of buildings in the Federal Government’s portfolio, primarily located on military bases. Typical bases locate training and operating functions, administration, housing, and recreation functions “on-base”, enabling Air Force, Army, Marine Corps and Navy organizations to operate efficiently and securely. Given that some military functions require large amounts of land and are not compatible with civilian or private land use, e.g. long-range weapons firing, these bases are often very large (measured in terms of square miles) and remote from major urban areas. Thus there is a tendency for military bases to become self-sufficient communities and there are good military readiness reasons for this self-sufficiency as well.

(2) Military bases which were located closer to urban centers are actually more likely to be closed, through Base Realignment and Closure (BRAC), for several reasons.

(a) As the Military Services were downsized after the VietNam War and then after the end of the Cold War, building utilization was reduced, while the Military Services still had high fixed operating costs for
their bases. So the Defense Department could house its reduced force structure more efficiently and cost effectively on fewer bases.

(b) Since military training and operations is often incompatible with surrounding private communities, the smaller bases, with less buffer space, close by urban areas were more likely to be the subject of complaint by surrounding communities, and to be closed. The larger bases, which tend to be further from major urban areas, had space to house the functions transferred from the smaller bases, and tended to not be closed.

(c) Over time, as urban centers expanded and eventually surrounded such a military base, surrounding land values increased. The military’s low-rise, low-density land use pattern was no longer the highest-and-best-use. The functions housed on such bases could be relocated to some underutilized base, while the Military Departments could then benefit from the sale of the land. The Presidio of San Francisco, Ford Ord (Monterey, CA) and El Toro Marine Corps Air Station (Irvine, CA), are all examples of bases closed in this manner.

(3) Most major military bases were acquired either prior to World War II or at the very start of that war, as the United States mobilized and the military services expanded. Very few bases have been added since then. The military bases’ original infrastructure systems also date to that period. These bases had sufficient land on which to construct whatever buildings were necessary for their tenant activities, and as mentioned earlier, low-rise, low-density
development was utilized, as it was the most inexpensive and rapid approach to development. The military organization which operated such a base had no need to make use of privately owned facilities; usually it had the land and the funds to build “on-base”. In fact, it would generally be inconvenient and inefficient to use private sector facilities. That is true because any such private facility would be located “off-base” and the military activity housed there would then be remote from other “on-base” military entities.

(4) These bases also required infrastructure and developed electrical, water, sewer, and natural gas distribution systems, road networks, and often made use of central heat plants. Such bases relied on a Defense Department “Public Works” organization, identical in many respects to that of a small-to-mid-size city, for all infrastructure operations. And rather than have every tenant organization pay rent and operating expenses – to the Public Works organization, it made more sense to have the PW organization funded directly by the Defense Department.

(5) From the Korean War through the end of the Cold War, almost all building construction on such bases was funded – in cash – by the Military Construction Appropriations Subcommittees in the Senate and the House of Representatives. It should be noted that each full (Senate and House) Appropriations Committee has both a Defense Department Subcommittee, to take care of operating budgets, and a separate Military Construction Subcommittee, solely to address real property capital budgets. By having
these separate subcommittees, there was any assured availability of funding for construction.

(6) In summary, the model for providing real property (buildings) within the Defense Department has been to pay for construction in cash, own all buildings, operate them with a centrally-funded, government “Public Works” organization, and allow tenants to live on-base, without paying any rent or paying for individual operating expenses.

(7) Certain military functions have made use of the private sector to provide their real property needs, since their inception. The best examples are the GOCO “Government Owned Contractor Operated” or COCO “Contractor Owned Contractor Operated” manufacturing or distribution plants within the Defense Department, such as the Army Ammunition Plants, Depots and Distribution Centers. Effectively though, in these operation, the real property which is provided or developed is ancillary to a supply or distribution contract. For example, the government and the DuPont Corporation sign a 20-year contract to provide ammunition, and so the DuPont Corporation then builds or invests in an Ammunition Plant to be able to fulfill its contract.

b. **Department of Veterans Affairs.** The VA was originally established in 1930 and expanded in the immediate post-WWII period and provides medical treatment to veterans. Starting with 54 hospitals in 1930, it now has 171 medical centers; more than 350 outpatient, community, and outreach clinics; 126 nursing home care units; and 35 domiciliaries. The medical centers are generally owned and operated
by the VA, and some have on-site housing for recuperating veterans and staff. The VA tends to have its facilities located close to urban centers, to be accessible for their patients. The same general approach as the Defense Department was used by the VA, that is, owned facilities, paid for in cash, and operated by a government on-site staff. However, in some cases, the owned facilities are owned and operated by the General Services Administration, and the VA pays rent in those cases. Many of the outpatient, community, and outreach clinics are leased from the private sector through the General Services Administration.

c. **General Services Administration:** The General Services Administration (GSA) is an independent agency of the United States government, established in 1949 to help support other federal agencies. The GSA’s Public Buildings Services (PBS) provides office space to federal agencies, managing $500 billion in real property, divided among 8,300 owned and leased buildings. (GSA will be used interchangeably for PBS in this paper which is also customary throughout the federal government). Effectively, PBS provides facilities and office space for most non-uniformed federal agencies domestically. Thus PBS does not support the Defense Department, VA, or NASA, unless one of these agencies is leasing office space. PBS also does not support overseas work. So overseas embassies fall under the purview of the Department of State while the Department of State’s office space in the United States is provided by PBS. Most remaining federal agencies including the Departments of Agriculture, Commerce, Education, Energy, Interior, Justice, Health and Human Services, Housing and Urban Development, Labor,
Transportation and Veterans Affairs have their office space requirements provided by GSA.

d. GSA – PBS is funded primarily through the Federal Buildings Fund, which is almost entirely supported by rent from federal tenant agencies. Only about 1% of the GSA’s annual operating budget is appropriated directly from taxpayer funds.

(1) GSA's rent income is utilized differently based upon whether the rent is being paid for a federally owned building or a private leased building. For federally owned buildings the entire rent is paid directly into the Federal Buildings Fund. For private leased buildings the rent is paid to the building owner/landlord, with only a 5% to 7% fee paid for GSA services, into the GSA’s Federal Buildings Fund.

(2) Originally this federal building fund served to pay all expenses related to GSA operations, building maintenance and repair, and construction of new buildings. The intent of this federal building fund was to have GSA operates like a business, paying out from the fund for new buildings, which would then be leased to federal agencies, whose rents would then be paid back into the fund. Rents are set based upon market conditions and building appraisals.

(3) However, as Federal Buildings nationwide aged (many are historic buildings), they required more maintenance and repair, so less funds became available for the construction of new buildings. Maintenance and repair was also often deferred in many buildings, as GSA was required to focus on failing systems in the oldest buildings. As a result, even the newer buildings
in the federal inventory often deteriorate rapidly. Unfortunately, since rents are set based upon building appraisal, rent income also decreased as federal office buildings were reclassified from Class A to Class B to Class C office space. This resulted in a downward spiral, in which fewer and fewer new buildings could be built, thus decreasing potential rent income.

(4) By the 1990s, construction of new buildings had to be funded completely by direct Congressional appropriations, that is, not from income paid into the Federal Building Fund. Since the bulk of construction funds have that used for US Courthouse construction, most federal agencies which had new space requirements within the last 20 years have relied on leasing. (Over this period, the amount of space leased by GSA has grown to where the GSA now leases more space than it owns.)

(5) In recent years, GSA’s construction appropriation has typically averaged $800 million per year, most of which was used to build new US Courthouses. In the last two fiscal years however, Congress slashed these appropriations and GSA received less than 1/10th of their previous average annual construction funds (these funds were used mostly for change orders and to complete previously started construction projects).

(6) As federal agencies’ needs had to be met more and more by leasing space from the private sector, GSA and Congressional leaders have become concerned of the solvency of the Federal Building Fund (FBF). Recall that GSA only receives a 5 to 7% fee on private leases. GSA officials understand the necessity of leasing to meet agency needs, but are dismayed by the lost
income opportunity. In 2007, GSA leaders reported that the FBF was going bankrupt.

(7) When a federal agency identifies an office space requirement to GSA, GSA first determines if there is vacant space in an appropriately located federal building. If such space is available, the agency is typically then required to occupy this space (thus their entire rent is paid directly into the Federal Building Fund). GSA seeks to minimize vacancies in the federal buildings and has achieved very high occupancy rates.

(8) From the federal agency standpoint, the agency may benefit from being co-located with other federal agencies. Its customers may also benefit by providing its customers a “one-stop” experience. That is, the Social Security Administration, Veterans Affairs (outreach functions), Immigration and Naturalization Service, Internal Revenue Service, etc. are often located together in the same federal building. Also, if the federal agency must make investments in specialized infrastructure or building systems, the agency can take advantage of these indefinitely. Agencies that have specialized IT systems, or above-standard security requirements, are often required to make such investments. In private leases, at the end of the lease term, the agency may be required to move out, losing the value of any such investments made in their space.

(9) However, often conditions in federal buildings are only fair and services may be limited. For example, most federal buildings HVAC systems are out-of-date and provide limited zone control. Parking is also very limited and
maintenance/repairs are often delayed; sometimes major repairs are delayed for years until projects are approved and funded by Congress. Agencies that have high – level physical security requirements, such as involving National Security, can typically not meet these requirements if they are located in the same federal buildings as agencies who must be accessible to the American public and have walk-in customers.

(10) For a federal agency that derives synergies from being located nearby other federal agencies, the advantages of being located in Federal Building space, likely outweigh the disadvantages. The position of GSA, and their authorizing committees in Congress, is that if an agency has a permanent office space requirement, it should be met in federally owned buildings, not through private leasing.

(11) GSA is one of the few federal agencies which has its own leasing authority. GSA is able to award 20 – year lease contracts to private sector lessors. The rent payments for the entire term of the lease are fully guaranteed by the federal government, which has never defaulted on a rent payment. There are also no termination-for-convenience clauses included in GSA lease contracts, so a lessor’s income is fully assured for the entire lease term. Given that US debt is AAA rated (until recently anyway), having a federal agency lessee is lucrative and safe for a lessor.

(12) In addition, at the end of the lease term, most federal agencies tend to stay and renew in place. If an agency has made significant investments in the leased space, they almost always prefer to stay. Recently however, due to the
federal budget deficit and budget cuts in federal agencies, agencies are attempting to consolidate leases and reduce their leased space. But since moving to a new leased location entails extensive one-time costs, such as the cost of the move itself, data cabling, furnishings, and above-standard Tenant Improvements, with reduced Agency budgets, agencies may actually be unable to move elsewhere.

(13) As federal agency budgets are reduced, one might question if agency rent payments will be as assured in the future. The Office of Management and Budget, which directs all Federal Government spending, has taken the position that rent payments are mandatory and are to be paid first before all other expenses, including employee salaries. So lessors with existing lease contracts can be assured payments through the lease term.

(14) GSA however, may have problems in the future based on their agreements with their federal agency tenants. Almost all GSA leases include a 90-day cancellation notice clause. This clause allows the tenant agency to end their occupancy agreement with GSA, even though the lease contract between GSA and the lessor will continue. Previously, if a federal agency’s operations changed, eliminating the need for some space, the agency could then vacate the no longer needed space, and not be required to pay rent for the remaining lease term. GSA would then locate a federal tenant to backfill this leased space. Since the vacated space was already built out and fully furnished, this was a desirable option for many federal agency tenants. (In small towns or remote areas, leases were non-cancelable, since it was
unlikely that GSA could find a tenant to backfill the space.) Federal agencies paid a 2% fee on top of their annual rent for this "lease cancellation insurance". In general though for most of the past 30 years, federal agency office space requirements have been stable so GSA benefited greatly from this additional fee. (One federal agency with a $500 million rent budget thus paid $10 million annually for this insurance, while between 2000 and 2010, it only vacated leased space totaling 15,000 ft².) Admittedly in the future as federal agencies utilize space more efficiently and reduce their staffing, these cancellation options may cause financial problems for GSA.

6. Federal Government Authorities affecting Real Property Management:

   a. Congressional authorities.

      (1) For a federal government agency to do something, it must have authority to do so. All agency authorities are established by statute. Agencies are overseen by congressional authorizing committees, which are responsible for establishing these authorities. These authorizing committees have established "standing authorities" in the US code that provide their agencies the authority to operate and exist until rescinded. Many of these authorities have limitations however. For example, GSA is allowed to lease space with no further approval needed as long as the annual rent does not exceed $2.8 million.

      (2) If an action that a federal agency would like to take is not included in their standing authorities, individual authority for that action is then required. So if a federal agency needs a larger amount of leased space, a “prospectus”
authorization is required. For GSA to execute a lease which costs more than $2.8 million annually, a lease prospectus must be submitted to and approved (authorized) by the appropriate authorizing committees. In this manner and by setting limits within the standing authorities, the oversight committees can control spending and have control over projects/actions in which they are interested.

(3) In the Federal Government real property arena, the authorizing committees have limited the authority for federal agencies both to purchase/construct buildings and to lease space. Effectively, all three of the agencies discussed (DOD, VA, GSA) must seek congressional authority for all significant building purchases/construction and for any large leases. Of these three agencies, only GSA can award lease contracts with a 20 year term. DOD can and does achieve long-term lease contracts, but does so by extending one-year contracts, which are subject to the availability of annual funds, from year-to-year. Needless to say, a financial institution might be reluctant to amortize tenant improvements for a DOD tenant over 20 years, knowing that the tenant might not renew next year. DOD tenants typically then are required to pay for much of their above-standard Tenant Improvements in cash.

(4) Congressional Authorizing Committees have in recent years provided some additional authorities to enable better management of the US Government's real property assets. Both DOD and the VA have been given "Enhanced Use Leasing (EUL)" authority. To explain this EUL authority, one must first
understand that normally private entities cannot make investments in federal property, other than in very limited circumstances, such as GOCO (Government Owned, Contractor Operated) facilities - ammunition plants for example. Private contractors are allowed to make limited improvements to government property if their contract requires them to operate on government property. These improvements are typically minor and necessary for them to accomplish their contract, e. g. setting up a marshaling or storage area on a military base for them to utilize while their contract is in effect. Since ownership of government real property is exclusive, no private entity is likely to make investments in property in which she has no ownership interest.

(5) The authorizing committees realized that often the government has land which may be underutilized and for which the taxpayer is gaining no benefit. Although one option would be to excess that land and sell it to the highest bidder, sometimes that is undesirable. If the land is located on a military base, the government might want to retain ownership and have some control on who can access the property or to ensure a compatible land use. Through their EUL legislation, 10 US Code § 2667, Congress authorized DOD and the VA to ground–lease federal land for up to 50 years. DOD and the VA were also allowed to retain the proceeds from these ground leases. With a long-term ground-lease being approximately equivalent to fee-simple ownership (obviously with no reversion or resale however), a private entity might then be willing to make major investments in this property based on
the income that could be generated. For example, private companies who do
work on a military base when normally be required to have their office
facilities "off–base". If a private investor could construct and lease out
office-space “on-base”, these companies might be happy to relocate on-base,
in a secure environment, close by their customers.

(6) More recently, Congress provided somewhat similar authority to GSA in 40
US Code 585 (c) and §412 Public Law 108-447, to give GSA greater
flexibility and enable them to make better use of their real property assets. In
the first authority, ground lease – lease terms are limited to 30 years though.

b. Office of Management and Budget (OMB) authorities and guidance.

(1) The Office of Management and Budget (OMB) also establishes authorities
in the form of guidance and circulars that affect how the federal government
can acquire and manage real property.

(2) OMB Circular Number A-11 was first created in the early 1990s to provide
budgetary guidance for the federal government. Based on some perceived
abuses in leasing which occurred during the 1980s, OMB promulgated
budgetary scoring rules to be applied to all lease actions. These scoring rules
were based on the Financial Accounting Standards Board (FASB) Statement
Number 13 – Leases. This statement was created by the FASB to establish
rules for how private sector companies should expense or capitalize leases,
and carry them on their balance sheet.

(3) OMB’s guidance is located in Appendix A – Scorekeeping Guidelines and
Appendix B – Budgetary Treatment of Lease Purchases and Leases of
Capital Assets, of Circular A-11. In these appendices, OMB provides rules to distinguish lease purchases and capital leases from operating leases. The following criteria is used for defining an operating lease:

(a) Ownership of the asset remains with the lessor during the term of the lease and is not transferred to the Government at or shortly after the end of the lease period.

(b) The lease does not contain a bargain-price purchase option.

(c) The lease term does not exceed 75 percent of the estimated economic lifetime of the asset.

(d) The present value of the minimum lease payments over the life of the lease does not exceed 90 percent of the fair market value of the asset at the inception of the lease.

(e) The asset is a general purpose asset rather than being for a special purpose of the Government and is not built to unique specification for the Government as lessee.

(f) There is a private-sector market for the asset.

(g) Risks of ownership of the asset should remain with the lessor.

(4) The impact of this operating versus capital lease determination is in the scoring of the Agency’s budget. If a lease is determined to be an operating lease, only one year’s rent is scored against the Agency’s current fiscal year budget. This implies that the lease expense is an operating expense, not a capital one. If however, a lease is determined to be a capital lease, then the full cost of the lease over its entire term is scored against the Agency's
budget. This means that although the agency is only required to pay one
year’s rent at a time, it must keep the funds to pay the rent, for the full lease
term, available and cannot use those funds for other purposes.

(5) Effectively, no Federal Agency can afford to set aside the large amount of
funds that would be required for a capital lease. Arguably, it would also not
be good fiscal stewardship to do so, as little or no value is provided to the
taxpayers by having these funds set aside for future rent payments, unused
until a future year’s rent becomes due.

(6) OMB’s intent was clearly to prevent capital leases from occurring. Since it
was also OMB’s objective to have the federal government own versus lease
assets needed for the long-term, OMB believed that this guidance would
cause Federal Agencies to identify and submit their capital requirements for
Congressional approval to purchase/construct such items. And, in the case
of GSA-managed Federal real property requirements, the funding source for
such purchases/construction is the Federal Building Fund. For the last two
decades however, the Federal Building Fund was primarily utilized to
support Courthouse construction and is now nearly bankrupt. Therefore
even if a Federal Agency utilized this criteria to identify a capital
requirement, there is a negligible probability that the needed funding to
purchase or construct a building would be provided.

(7) Federal Agencies were thus left with a dilemma. Since Federal Agencies
utilize buildings to house and support their missions, requesting construction
funding would likely result in in an indefinite delay before (if) their space
requirement would be met. (Actually DOD agencies have had a relatively well-funded military construction program. However, most non-uniformed Federal Agencies rely on GSA and the Federal Building Fund for any government owned building needs.) So if the required building or space is critical to an Agency's mission, the only assured way of providing this building space is through an operating lease.

(8) Therefore, federal managers typically choose to rely on operating leases, even for permanent or very long-term building space requirements. Since the government gains no ownership interest in such leased space, agency missions are housed through a series of operating leases. This approach is considered by both the Government Accountability Office and the Congressional Budget Office as being less cost-effective. These OMB guidelines have actually had an unintended and undesirable effect. As the GSA's senior Real Estate Attorney reported, "never has such well-intended guidance had such an opposite result".

(9) To assure that the operating lease criteria are met, federal managers adjust lease contracts and the lease term accordingly:

(a) The government does not accept ownership and the lessor remains the owner.

(b) Lease contracts don’t contain bargain-price purchase options.

(c) Lease terms are limited to less than 75 percent of the estimated economic lifetime of the asset (typically not a problem with real property assets).
(d) Agencies tried to meet their needs wherever possible in general purpose assets for which there is a private-sector market.

(e) To ensure the present value of the lease payments (over the lease term) do not exceed 90 percent of the fair market value, the lease term is adjusted downwards until this criteria is met. Amazingly, both GSA managers and OMB officials understand that these adjustments are being made, and in fact OMB requires this "lease scoring analysis", often resulting in very odd lease durations such as 13 or 17 years, before they will approve a lease prospectus.

(f) The absurdity of these criteria has been argued with OMB leaders for the last two decades. Rather than achieve a greater level of ownership through lease purchase or bargain-basement purchase provisions in the course of a lease, these OMB rules have actually served to reduce Government ownership.

(g) It should also be noted that the authors and proponents for FASB Standard Number 13 have also argued that utilizing their criteria in this manner is a misuse. They point out that the purpose of their Standard is to govern how private sector companies account for leases, not to prohibit capital leases, lease purchases, bargain-basement prices, etc.

(h) Interestingly, these operating/capital lease rules were established by OMB in response to the Navy’s leasing of supply ships and had nothing to do with real property. It should also be noted that the
Navy continues to lease such ships to this day (but having adjusted their lease terms so that these are now operating leases).

(10) Another limitation based on OMB guidance is that Federal Agencies cannot directly borrow funds. State, local, and municipal governments typically borrow funds, often through bond issues, to pay for building and infrastructure improvements. Likewise corporations can finance capital improvements through multiple means of borrowing. Prior to 1980, individual Federal Agencies could utilize borrowed funds to address their capital requirements. One form of doing so was through the Treasury Department’s Federal Finance Bank (FFB). Formerly Federal Agencies could apply for funding through the FFB and finance requirements at as little as 50 basis points above the risk free rate. OMB was concerned however that Agency borrowing amounted to an end run and was increasing the federal government's debt and so established guidance to ensure all borrowing was accomplished through the Federal Budget Process. (In a recent meeting with Canadian government real property management officials, they were shocked to learn that in the US, Federal Agencies can only lease facilities or purchase/construct them by paying in cash.)

7. Alternative Real Property Acquisition Methods.

a. Federal Construction – DOD

(1) Within the Defense Department, almost all construction is accomplished through its two construction agents, the US Army Corps of Engineers (COE) or the Navy Facility Engineering Command (NAVFAC). The Corps of
Engineers accomplishes construction at Army and Air Force bases and at selected joint headquarters locations. Navy Facility Engineering Command does construction at Navy and Marine Corps bases and also at other joint headquarters. Both agencies are project funded agencies, with a percentage of each project’s funding is retained by them to cover their salaries and expenses. (As overall MILCON funding has been reduced, both of these agencies have adapted, doing more smaller renovation-type project work for example, but have also had to reduce the size of their organizations. In some parts of the country their workload has actually increased though as a result of BRAC closures and consolidations.)

(2) An acquisition begins once Military Construction funds are appropriated by Congress; this funding is provided directly either to the COE or NAVFAC.

(3) Both the COE and NAVFAC have developed great expertise in often very complex construction projects. Therefore even before funds are received, an acquisition plan will already have been developed and approved. For both agencies, all construction and most design is actually accomplished through contracting with private-sector firms. On receipt of funding, the COE or NAVFAC implements its acquisition plan, starting with design acquisition, later followed by construction acquisition (unless a design–build approach is being utilized). On construction completion and acceptance, the completed facility and turned over to the military base for operation.

(4) Even though COE and NAVFAC directly benefit from construction funding, there is no conflict of interest in the MILCON project requesting and
execution process. MILCON projects are requested through the military departments, through the department’s installation management staff (in the Army, this is the Army’s Assistant Chief of Staff for Installation Management (ACSIM)). The individual military departments evaluate, prioritize, and submit their requests, through the Defense Department and thence to Congress. So the requesting entity, the Department of the Air Force for example, is unrelated to the executing entity, the Army Corps of Engineers.

(5) As discussed previously, the military departments typically do not charge individual tenants rent and centrally fund their base/installation public works organizations for maintenance/repair costs and operating expenses of their tenants.

(6) Thus the cash flows for the life of a DOD-constructed building will have an initial cost for design or possibly design–build, followed by the construction costs, and after occupancy, annual operating expenses, which includes maintenance and repair support by the base/installation Public Works organization.

b. Federal Construction – GSA

(1) In a GSA-managed construction acquisition, similarly as above, GSA receives funding for approved construction directly in their appropriation. In the last decade, as was mentioned earlier, most construction funding for new facilities was used for US Courthouses. Several projects of special interest to the GSA oversight committees have also been funded, such as the
Department of Homeland Security Headquarters near St. Elizabeth's in Southeast Washington DC.

(2) GSA does not have the same complexity of projects as the Corps of Engineers or Navy Facilities Engineering Command and is much more focused on office buildings. Since there are many more projects requested then approved, execution is almost always phased with funding for design provided one year, followed by construction funding several years later. Often the tenant agency is required to provide its own funding for other than standard building features. Design–build is used less frequently and GSA relies on very traditional contracting approaches.

(3) The cash flows for the life of a GSA building should have an initial cost for design, followed by construction costs to years later, followed by agency rent payments which go on forever. It should be noted that there is no Federal Building Fund debt to be retired, since construction was funded by direct appropriation, yet rent continues indefinitely.

(4) All GSA building projects, whether construction or lease, are requested through GSA to Congress. Thus there is the potential for a conflict of interest because GSA is also the executing agent. And a construction project, when occupied, will greatly increase GSA’s rent income whereas a lease project only provides GSA a small fee.

c. Operating Lease / Lease Construction

(1) In a lease acquisition, GSA provides potential lessors with the necessary requirements and specifications and solicits offers from them. Almost all
GSA leases are set up as full-service leases, combining rent and operating expenses.

(2) Typically the only initial cash flow payments by the government in such a project would be for above-standard features. It should be noted that even these payments are made in arrears, on completion and acceptance of work by the government. As a result, lessors must be able to obtain financing for all build-out to include specialized government requirements. After occupancy, rent payments are made monthly also in arrears. If above standard services are required, payments for those services are made separately.

d. **Ground Lease/Lease Back (Public-Private Partnership).**

(1) Since the purpose of this study is to compare different means of acquiring office space for federal agencies, the discussion and acquisition approach will be focused on the authorities available to GSA (40 US Code 585(c) and §412 Public Law 108-447) vs. the more general DOD EUL authority. In some respects, the Ground Lease / Lease Back approach is similar to the DOD’s Enhanced Use Leasing (EUL) but overall objectives and terms differ.

(2) Although both authorities have been available to GSA for some time, OMB’s apparent distrust of Public-Private Partnership approaches has prevented approval of any actual projects as of this date.

(3) The first basic requirement to utilize either of these authorities is federal land ownership. This land can potentially be existing federal land on which
the GSA desires to construct an office building, or it could be land purchased by the federal government, donated to the federal government, or provided through some sort of land swap arrangement, in which the federal government and a private entity exchange ownership of land. Federal Real Estate Attorneys have opined that for the 40 USC 585(c) or §412 PL 108-447 authorities to apply, the government must have actual fee-simple ownership. “Owning” the land through a 100-year ground lease would not allow this authority to be used. If the government were to have multiple owned land parcels to pick from, subject to NEPA (National Environmental Protection Act), there is no requirement to compare or to have competition among the different parcels.

(4) The government then advertises for interest for investors/developers with whom to establish a 30 or 40-year ground lease. A source selection process is required, at the conclusion of which the winning investor/developer is selected. Presumably financial capacity, experience with projects of this size and complexity, and the investor/developer team member qualifications would be among the source selection criteria. The government would need to provide information on what its intentions are for the parcel, the amount and type of office space for example. The ground lease to be paid to the government is based on Fair Market Value. Typically ground lease payments would not be required to start until the office building is completed and occupied by tenants. (This is the case since a federal agency is the tenant.)
(5) As a separate but related transaction, an operating lease (Lease Back) contract will also be established between GSA and the winning investor/developer. In this lease, the investor/developer is the lessor (of the office space), while the government is lessee. It should be noted that this lease is must meet all provisions for an operating lease. The duration of this contract will definitely be less than the ground lease. (Otherwise it would score as a capital lease.) There can also be no guarantees, extensions or terms that would require the government to remain as lessee in a succeeding lease contract. That is because the lessor is required to assume all risks of ownership to meet OMB's operating lease criteria. This means of course that the investor/developer is assuming risk that the government could potentially move out at the end of the first operating lease term. Since the investors’ loans or bonds will likely not be fully paid off at the end of this first lease term, the investor definitely has some financial exposure.

(6) At the conclusion of the ground lease term, the ground lease contract expires and at that time, the land, with all improvements (i.e. the office building), reverts to the federal government, by operation of law.

e. Mortgage/Direct Borrowing

(1) Although federal agencies do not now have the authority to directly borrow funds, this acquisition approach will be based on the assumption that an agency could directly finance the project. In comparison with the previous alternatives discussed, this approach has features of both the GSA construction and the operating lease alternatives.
(2) Construction would be accomplished by a federal agency, on federal land. The federal agency would immediately own the completed building, but the up-front funding would be provided by private financing as in the lease alternatives. The federal agency tenant would then make rent payments to pay for debt service.

8. Sample Project Analysis and Results.

a. Discussion of cash flows

(1) Cash flow diagrams will be established from the standpoint of the federal government. Specifically cash flows will be entered up as on appropriation of funds by the Congress, as it is at that point that the taxpayers’ funds are made available to be utilized. Since funds may be appropriated to either of the two different federal agencies, the GSA and a tenant agency, and funds may also be transferred between agencies, the above cash flow definition is the only one that makes sense and provides for full accountability of funds. If cash flows were entered based upon payment or expensing by only one of the two affected federal agencies, the impact on the taxpayer would be distorted. This is especially true since as funds are received in GSA's Federal Building Fund, accountability is lost and thereafter it would be impossible to determine for what purpose these funds were utilized and when they were actually expensed.

(2) When Congress appropriates funds to either agency for a purpose related to the proposed acquisition, that appropriation signifies a project cost and is considered a negative cash flow. Payments received by the federal
government from a private sector entity, such as ground lease payments to the government, are considered as positive cash flows.
b. **Sample Project Parameters and Assumptions**

The sample project utilized a 400,000 RSF building and was analyzed over a 30 year study period. Other parameters and assumptions are provided below.

<table>
<thead>
<tr>
<th>Project Parameters and Assumptions</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assumptions and cash flow</strong></td>
<td></td>
</tr>
<tr>
<td>Building Size</td>
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<tr>
<td>Study period</td>
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<td>Initial Building cost/value (including all development costs) / SF</td>
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<tr>
<td>Initial Land Value as percentage of building value</td>
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<tr>
<td>Discount Rate for Net Present Value (NPV)</td>
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<tr>
<td>Operating Expense Assumptions</td>
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<tr>
<td>Operating Expenses per SF</td>
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</tr>
<tr>
<td>Taxes and Insurance per SF</td>
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<tr>
<td>Operating expense, taxes, insurance escalation</td>
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</tr>
<tr>
<td>Rent Assumptions</td>
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</tr>
<tr>
<td>Lease Constant Building</td>
<td>8.5%</td>
</tr>
<tr>
<td>Lease Constant Land</td>
<td>8.5%</td>
</tr>
<tr>
<td>Rent escalation</td>
<td>2.5%</td>
</tr>
<tr>
<td>Rent period</td>
<td>30 Years</td>
</tr>
<tr>
<td>Mortgage alternative assumptions</td>
<td></td>
</tr>
<tr>
<td>Initial equity investment percentage (land and buildings)</td>
<td>10.0%</td>
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<tr>
<td>Debt interest rate</td>
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<tr>
<td>Debt amortization period</td>
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<td>Building and land value factors (end of study period)</td>
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<td>Building useful life / obsolescence (including capital re-investment)</td>
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<td>Land Value escalation per year</td>
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<tr>
<td>Ground Rent Assumptions</td>
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<td>Ground Rent Term</td>
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<td>Ground Rent Constant</td>
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<tr>
<td>Ground Rent Annual Escalation</td>
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</tbody>
</table>
c. **30-Year Net Present Value Analysis**

<table>
<thead>
<tr>
<th>Alternative</th>
<th>NPV</th>
<th>Total Cash</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alternative 1:</strong></td>
<td>Federal Construction (GSA)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$390,681,195</td>
<td>$667,578,547</td>
</tr>
<tr>
<td><strong>Alternative 2:</strong></td>
<td>Federal Construction (DoD)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$189,445,160</td>
<td>$238,429,624</td>
</tr>
<tr>
<td><strong>Alternative 3:</strong></td>
<td>Ground Lease Lease Back</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$264,433,017</td>
<td>$511,602,600</td>
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<tr>
<td><strong>Alternative 4</strong></td>
<td>Lease Construction</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$291,817,984</td>
<td>$622,320,817</td>
</tr>
<tr>
<td><strong>Alternative 5:</strong></td>
<td>Private Sector Ownership / Mortgage</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$222,596,575</td>
<td>$377,323,464</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>NPV</th>
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</table>

**Discussion of Results:** Alternatives are arrayed below in order of increasing Net Present Value from least to most expensive.

1. **Federal Construction – DOD.** NPV = $189,445,160. This was the least expensive alternative even though the full construction cost was required in Year Zero, because the tenant agency was not required to make rent payments and there were no financing costs.

2. **Mortgage.** NPV = $222,596,575. The Mortgage alternative was the second least expensive alternative. This was also as expected. Although more expensive than DOD Federal Construction, the lowest financing costs were achieved by eliminating the risk premium associated with consecutive operating leases.
(3) **Ground Lease/Lease Back.** NPV = $264,433,017. The Ground Lease/Lease Back (or Public-Private Partnership) Alternative was the next least expensive alternative. It should also be noted that the complicated ground lease/operating lease structure, which is required only to prevent scoring, increased risk and was approximately $42 million more expensive than the direct mortgage alternative. Effectively the government could save between 16 and 19% of the project’s cost, if agencies could borrow directly through a mortgage.

(4) **Lease Construction.** NPV = $291,817,984. Leasing proved to be expensive since the government has no reversionary income as it lacks any ownership interest.

(5) **Federal Construction – GSA.** NPV = $390,681,195. The most expensive alternative was, as expected, federal construction utilizing the GSA model, as expected. Effectively Congress is required to appropriate funds for the building twice, once for the initial construction and again through the agency rent paid during the 30 year term. The difference in cost between the GSA federal construction and the DOD federal construction alternatives is the tenant agency rent appropriation subsidization of the Federal Building Fund.
### Summary of Alternatives

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Description</th>
<th>NPV</th>
<th>Total Cash</th>
</tr>
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<td>Alternative 1:</td>
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<tr>
<td>Initial Investment</td>
<td>$115,000,000</td>
<td>$115,000,000</td>
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<tr>
<td>Annual Payments</td>
<td>$291,817,984</td>
<td>$622,320,817</td>
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</tr>
<tr>
<td>Reversionary Interest</td>
<td>$(16,136,789)</td>
<td>$(69,742,270)</td>
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<tr>
<td>Total</td>
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<td>Alternative 2:</td>
<td>Federal Construction (DoD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Investment</td>
<td>$115,000,000</td>
<td>$115,000,000</td>
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<tr>
<td>Annual Payments</td>
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<tr>
<td>Reversionary Interest</td>
<td>$(16,136,789)</td>
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<td>Initial Investment</td>
<td>$15,000,000</td>
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<tr>
<td>Annual Payments</td>
<td>$265,569,805</td>
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<tr>
<td>Reversionary Interest</td>
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<tr>
<td>Alternative 4:</td>
<td>Lease Construction</td>
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<tr>
<td>Initial Investment</td>
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<td>$-</td>
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<tr>
<td>Alternative 5:</td>
<td>Private Sector Ownership / Mortgage</td>
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</tr>
</tbody>
</table>
### Summary of Alternatives

#### Alternative 1: Federal Construction (OFA)

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#### Alternative 2: Federal Construction (DoD)

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</tbody>
</table>

#### Alternative 3: Ground Lease Lease Back

<table>
<thead>
<tr>
<th></th>
<th>NPV</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Initial Investment</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td>$264,433,017</td>
<td>$511,602,600</td>
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</table>

#### Alternative 4: Lease Construction

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</thead>
<tbody>
<tr>
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<td>$-</td>
</tr>
<tr>
<td>Annual Payments</td>
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<td>$622,320,817</td>
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<tr>
<td>Reversionary Interest</td>
<td>$-</td>
<td>$-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$291,817,984</td>
<td>$622,320,817</td>
</tr>
</tbody>
</table>
9. **Conclusions and Recommendations.**

   a. **Recommended Acquisition Approach.**

      (1) Clearly direct federal funding of federal construction, with no financing costs and no rent subsequently charged to the federal agency tenants, is the least expensive means of providing real property. However, given the federal government's large budget deficit, this approach is unlikely to be viable in the near future.

      (2) Although federal agencies are unable at this time to do a direct borrowing/a mortgage, this approach is recommended if authority is provided.

      (3) Finally, the Ground Lease / Lease Back is the least expensive acquisition approach, utilizing currently existing authorities and requiring the least funding.

   b. **Recommended Authority Changes.** It is recommended that the current operating lease/capital lease criteria be rescinded and lease purchases as well as other means of achieving government ownership be encouraged. It is also recommended that federal agencies be given the authority to enter into long-term mortgages for providing real property.
c. Other recommendations. The financial modeling methods currently employed by GSA are seriously flawed and result in the most expensive acquisition approach being utilized. The cash flow definition that GSA utilizes ignores major costs and does not identify the alternative which provides the lowest cost to the taxpayer.

d. Conclusions.

(1) At least until the federal budget situation improves, Ground Lease / Lease Back should be utilized as the preferred method of providing Federal Office Buildings.

(2) The current financial modeling methods used by GSA need revision so as to ensure the least expensive alternatives are selected to provide new office buildings.

(3) There may be a conflict of interest (bounded ethicality bias) in having GSA accomplished the financial modeling and recommend the preferred acquisition method, since the GSA's Federal Buildings Fund benefits greatly whenever Federal Construction through GSA is utilized.

(4) The general approach of funding GSA's Federal Buildings Fund through agency rents rather than through a direct appropriation may no longer be viable.
References


