NAVAL POSTGRADUATE SCHOOL
MONTEREY, CALIFORNIA

MBA PROFESSIONAL REPORT

ASSESSMENT OF COSTS AND BENEFITS OF THE MILITARY HOUSING PRIVATIZATION INITIATIVE IN SELECTED AREAS

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June 2004

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The Military Housing Privatization Initiative (MHPI) represents a dramatic revision in the construction and maintenance of military housing. The Basic Allowance for Housing (BAH) initiative is also a long waited major step towards providing an adequate quantity and quality of living quarters for service members and their families. This MBA compares MHPI to the other two family housing programs, such as military construction (MILCON) and BAH and analyzes the interrelationship among them. This project studied the examples of the Presidio of Monterey/NPS and the Hickam AFB housing privatization projects in details.

The research concludes that MHPI is a valuable and flexible tool for bridging the gap between existing housing needs and what the Government has been able to provide through traditional military construction. Since many long-term uncertainties exist regarding DOD’s future housing needs and the resulting effect of the BAH initiative, this project recommends capitalizing on the strength of each housing tool (BAH, MHPI) through a more integrated approach to ensure that the military’s housing needs are met as efficiently as possible. A better coordination on housing initiatives appear to be important, since housing allowances could rise in some areas, thereby making more local housing affordable to service members and lessening the need for renovation and construction. Greater adherence to policy of coordination is needed if DOD is to avoid building or revitalizing more housing than is needed under both military construction and privatization programs.
ASSESSMENT OF COSTS AND BENEFITS OF
THE MILITARY HOUSING PRIVATIZATION INITIATIVE
IN SELECTED AREAS

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ABSTRACT

The Military Housing Privatization Initiative (MHPI) represents a dramatic revision in the construction and maintenance of military housing. The Basic Allowance for Housing (BAH) initiative is also a long waited major step towards providing an adequate quantity and quality of living quarters for service members and their families. This MBA compares MHPI to the other two family housing programs, such as military construction (MILCON) and BAH and analyzes the interrelationship among them. This project studied the examples of the Presidio of Monterey/NPS and the Hickam AFB housing privatization projects in details.

The research concludes that MHPI is a valuable and flexible tool for bridging the gap between existing housing needs and what the Government has been able to provide through traditional military construction. Since many long-term uncertainties exist regarding DOD’s future housing needs and the resulting effect of the BAH initiative, this project recommends capitalizing on the strength of each housing tool (BAH, MHPI) through a more integrated approach to ensure that the military’s housing needs are met as efficiently as possible. A better coordination on housing initiatives appear to be important, since housing allowances could rise in some areas, thereby making more local housing affordable to service members and lessening the need for renovation and construction. Greater adherence to policy of coordination is needed if DOD is to avoid building or revitalizing more housing than is needed under both military construction and privatization programs.
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I. INTRODUCTION

A. RESEARCH OBJECTIVES

The purpose of this paper is to examine the defense department’s military housing privatization initiative and the need for change. The paper gives a general overview of the initiative and gives detailed examinations of two military housing privatization projects, focusing on the Presidio of Monterey/Naval Postgraduate School, Monterey, California and the Hickam AFB, Honolulu, Hawaii projects. It also profiles and compares the distinctly different approaches taken by the Air Force, Army, and Navy.

B. RESEARCH QUESTIONS

What is the Military Housing Privatization Initiative (MHPI), and what are the program’s original objectives?

What is the reliability of Life Cycle Cost Analyses conducted by various organizations so far?

How are two initiatives (MHPI and BAH) interrelated with each other, and what are the impacts of this interrelation?

What are the different approaches used by services when solving their Military Family Housing (MFH) problems.

What are the risks, benefits, and costs of the Presidio of Monterey/Naval Postgraduate School project?

What are the risks, benefits, and costs of the Hickam AFB project?

C. SCOPE AND LIMITATIONS

1. Scope

This paper will encompass a review of the MHPI program and its objectives. It will give a general overview that led to the creation of the MHPI program, will also describe the historical legislative basis of the program. It will examine the BAH initiative, a sister program of the MHPI and the effects that they exercise on each other. It will give an understanding of budget scoring problem as well as the service’s different theoretical approach to the housing problem. It will examine the deficiencies of previous cost and benefit analyses. Included in the scope are two military housing privatization
project analyses. This data and information then forms a basis for an evaluation of the effectiveness of the two programs and the Military Housing Privatization Initiative as general respectively.

2. Limitations

While this paper includes a variety of financial and other numerical data, it is not intended to be a detailed cost and benefits analysis of the MFH issue. Rather it is intended to concentrate on some aspects, facts, and concepts that may provoke critical thinking and may suggest new considerations and approaches to MFH problem.

D. METHODOLOGY

This paper is based on an extensive literature review, including other theses, congressional testimonies, Defense Department and Service component internal papers, reports, policies and plans, articles and web searches. Other sources of information involved personal interviews and communications of different representatives involved in the projects.

E. ORGANIZATION OF STUDY

This paper is organized into seven chapters. Chapter II provides the basic understanding of the MHPI and the problems associated with it. Chapter III provides an in-depth review of the different approaches of the Air Force, Army, and Navy. Chapter IV describes financial funds of the MFH and gives a review of previous cost and benefit analysis and the usefulness of that kind of assessment at the initial phase of the program. Chapter V and Chapter VI provide an analysis of the Presidio of Monterey/Naval Postgraduate School and the Hickam AFB projects respectively. Finally Chapter VII summarizes the conclusions of the authors and provides recommendations for what identified problems should be paid attention when planning future projects.

F. BACKGROUND

1. General Background

During the past four decades, housing for military personnel and their families has been a relatively low priority component of military construction. After a rapid expansion of what was then considered modern and up-to-date accommodations throughout
the 1950s and the early 1960s, the effort devoted to the construction and the upkeep of military housing did not keep up with the effects of natural deterioration and changing societal definitions of adequate housing. The decrease in quality of housing has accelerated since the end of the Cold War as a result of the uncertainties of base closures, both at home and overseas, and shrinking defense budgets, which have encouraged the channeling of construction funds into projects more directly related to operational readiness.

The Department of Defense (DOD) spends about $8 billion annually to provide housing for families of active-duty military personnel. Seeking to provide military families with access to adequate, affordable housing, DOD either pays cash allowances for families to live in private sector housing or assigns families to government-owned or government-leased units. The housing benefit is a major component of the military’s compensation package. DOD Housing Management Manual 4165.63M states that private sector housing in the communities near military installations will be relied on as the primary source of family housing. About 544,000, or two-thirds, of the military families live in private housing. These families receive assistance in locating private housing from housing referral offices at each major installation and are paid a cash housing allowance to help defray the cost of renting or purchasing housing in local communities.

For military housing itself, the Department of Defense (DOD) estimates that about 200,000 military family housing units are old, lack modern amenities, and require renovation or replacement. According to DOD, completing this work at current funding levels and using traditional military construction methods would take 30 years and cost about $16 billion.
To improve housing more economically and faster than could be achieved if only traditional military construction funds were used, the Congress enacted legislation at DOD’s request authorizing the Military Housing Privatization Initiative, to allow private sector financing, ownership, operation, and maintenance of military housing. Under the program, starting in 1996, DOD can provide direct loans, loan guarantees, and other incentives to encourage private developers to construct and operate housing either on or off military installations. Service members, in turn, use their housing allowance to pay rent and utilities to live in the privatized housing. Although there can be exceptions, DOD’s position is that the government’s estimated total costs for a privatization project should be equal to or less than the total costs for the same project financed by military construction funding by taking advantage of the private sector’s investment capital and housing construction expertise. The Military Housing Privatization Initiative permitted DOD to enter into a variety of arrangements with private sector entities to build and renovate military housing both on and off military bases. DOD’s goal was to encourage private sector investment to obtain at least $3 in military housing improvements for each dollar that the government invested.

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Table 1-1: Comparison of Military Construction and Family Housing Requests

| TOTAL | 8,987 | 9,036 |

For housing allowance, Congress approved DOD’s request for a new housing allowance program that started in January 1998. The program was designed to better match the allowance amount with the cost of housing by determining allowances on the basis of costs for suitable civilian housing in each geographic area and tying allowance increases to growth in housing costs. In January 2000, the Secretary of Defense announced a major new quality-of-life initiative to increase housing allowances, which would eliminate out-of-pocket housing costs entirely by year 2005.

Quality housing is a key element affecting the quality of life of military members and their families. Because quality of life directly affects personnel retention and ultimately unit readiness, DOD states that adequate housing can enhance its efforts to maintain a ready, quality force. Yet, affordable housing is unavailable in the communities surrounding some military installations, and the poor quality of on-base housing is a long-noted problem.

Common to all Services were concerns with compensation (including basic pay and the Basic Allowance for Housing, or BAH), quality of housing, and quality of environment in the workplace. BAH and quality of housing are closely intertwined. DOD can house approximately one-third of its military families in government owned units on military reservations. Those living off-base, either by choice or because of insufficient local government housing supply, pay commercial rates for utilities, such as water and sewer services, and rents or mortgages on their residences.

2. Legal Background

The MHPI is not the first attempt by Congress to create modern family dwellings quickly, nor is it the first time that Congress has encouraged DOD to partner with private industry. At least three separate approaches were tried during the Cold War, with varying degrees of success. The principal method has been reliance on the commercial housing
supply near military installations, and Congress has provided members with a cash allowance to defray part of the cost. The secondary method, intended for those locations where local housing is extraordinarily expensive or unavailable, has been to lodge members and their families in quarters built with appropriated funds on military reservations. In 1996, a third method was provided to DOD by Congress, the Military Housing Privatization Initiative (MHPI).

a. **Wherry Housing**

In 1949, Congress passed P.L. 81-221, which was intended to bring private homebuilders into the rental housing market for military personnel without requiring the use of military construction funding. As it was first implemented, the Military Services were allowed to solicit plans for housing from private builders. From those submitted, a Service chose the builder whose plan was deemed most suitable for the particular military facility. The builder arranged private financing and constructed homes on Government-controlled land for rental to military personnel. Later, in order to make the process more competitive, the program was changed so that a Service would contract with private architect-engineers for a standard set of housing plans at a designated military facility. Armed with these, the Services applied to the Federal Housing Administration (FHA) for an “appraisal and eligibility statement” that established a maximum insurable mortgage, effectively setting the high-end valuation for an individual housing unit. The Service then solicited bids for the project, which would be located on Government-owned or controlled land, from private housing developers. The lowest bidder was awarded a “certificate of need” which was used to apply to the FHA for mortgage insurance. Because private enterprise was, in essence, being issued a “license” to respond to a demonstrated market need using privately financed (albeit FHA-insured) housing, the developer retained title to the resulting real property and rented housing to individual Service members. The Wherry program supplied the greater portion of new military family housing constructed through the early 1950s, but congressional concerns with “windfall” profits accruing to private developers led to its effective termination in 1955.
b. Capehart Housing

Like Wherry housing, Capehart housing was built on Government-controlled land, exempting it from local building regulations. Unlike Wherry housing, where title to the resulting property remained with the private developer and individual Service members made rental payments to the owner. Capehart housing was built using private financing, but title was turned over to the Federal Government upon the completion of construction. In Wherry housing, individual members retained their housing allowances and paid rent to the private project manager, who was responsible for paying the project’s mortgage. Capehart housing was Government-owned, and members living there forfeited their entire housing allowances. DOD then made a single mortgage payment for a Capehart project to the private mortgager. By the early 1960s, DOD had constructed approximately 115,000 Capehart housing units. The last authorization for Capehart housing was made for Fiscal Year 1962. The construction of newer, larger Capehart units tended to draw tenants away from nearby Wherry housing. In 1957, the Services began purchasing the approximately 84,000 privately held Wherry units. Thus, both Wherry and Capehart housing eventually came under common administration and today are usually mentioned together as Capehart/Wherry.

c. Section 801 and 802 Housing.

These sections of Title VIII of the Military Construction Authorization Act of 1984 (P.L. 98-115) attempted to encourage the provision of privately constructed housing to military personnel by authorizing the Service secretaries to enter into contracts for the lease of facilities on or near military installations (Section 801, essentially a build-to-lease guarantee to a local property developer), or to enter into agreements to occupy rental housing near military installations (Section 802, a rent guarantee to encourage the erection of rental property). The impact these arrangements had on Service budgets quickly discouraged their use.

3. Military Housing Privatization Initiative (MHPI)

Both Wherry and Capehart construction programs and the use of Section 801/802 arrangements ended within a few years of their initiation. Although each attempted a different approach to providing housing and leveraging appropriated funds, none offered
more than very limited options for increasing the quantity and quality of the housing offered to the families of active duty military personnel. In 1996, Congress and DOD tried something very different. The Military Housing Privatization Initiative (MHPI) was devised to give the Department of Defense the ability to entice private investment by encouraging it to act like private enterprise. As businesses can be creative to take advantage of local real estate market conditions in customizing development projects, the MHPI was designed to give similar flexibility to DOD. This was intended as a step away from the perceived one-size-fits-all mentality of the earlier programs. Military Housing Privatization Initiative, was designed to improve military housing more economically and at a faster rate than could be achieved through traditional military construction funding by allowing private sector financing, ownership, operation, and maintenance of military housing. DOD asked the Congress to provide new authorities that would allow DOD to (1) provide direct loans and loan guarantees to private entities to acquire or construct housing suitable for military use, (2) convey or lease existing property and facilities to private entities, and (3) pay differential rent amounts in addition to the rent payments military tenants make. The new authorities would also allow DOD to make investments, both limited partnership interests and stock and bond ownership, to acquire or construct housing suitable for military use and permit developers to build military housing using room patterns and floor areas comparable to housing in the local communities. The authorities could be used individually or in combination. The Congress passed legislation containing 12 new authorities, and the initiative was signed into law on February 10, 1996.
II. MILITARY HOUSING PRIVATIZATION INITIATIVE

A. BASIC CONSIDERATIONS BEHIND THE MHPI

The basic premise behind the initiative is for the military to use the private sector’s investment capital and housing construction expertise. DOD has noted that the private sector has a huge amount of housing investment capital. By providing incentives, such as loan guarantees or co-investments of land or cash, the military can encourage the private sector to use private investment funds to build or renovate military housing. Use of private sector capital can reduce the government’s initial outlays for housing revitalization by spreading costs—specifically increased amounts for housing allowances—over a longer term. As tenants in privatized housing, military occupants receive a housing allowance and pay rent. DOD’s goal is to encourage private sector investment in order to obtain at least $3 in military housing development for each dollar that the government invests. By leveraging government funds by a minimum of 3 to 1, DOD officials state that the military can revitalize three times as many housing units as it would with a military construction project for the same amount of money, thus allowing the housing problem to be solved three times faster.

B. MHPI IMPLEMENTATION

Originally, the MHPI was centralized within the Department of Defense under the Office of the Secretary of Defense (OSD). Because of the complexity inherent in this new approach to military housing construction, the unfamiliarity of DOD contracting personnel with these kinds of negotiations, and new legal, financial, and budget issues that appeared as the program got underway, progress in the negotiation of contracts and in beginning construction was notably slower than originally envisioned. In October of 1998, the Secretary of Defense devolved operational responsibility for MHPI to the individual Services, with oversight and final approval authority vested in the OSD Office of Competitive Sourcing and Privatization.

C. WHY DO WE NEED GOVERNMENT CONTRIBUTION TO MHPI?

When developing housing privatization projects, experience has shown that the total funds available between developer equity and available private sector financing is
normally less than the total development cost. This dynamic creates a development gap, which must be filled by various uses of our authorities.

There are three basic causes of this development gap. First, consistent with the housing allowance initiative to eliminate out of pocket costs, housing privatization projects require the private sector developer to fund all development and maintenance costs based on the income provided by the rent paid by service members using their allowances, including utilities. Since these allowances are below market rents, an initial development gap is created.

Secondly, junior enlisted members assigned to on base housing built with traditional military construction normally occupy single family houses with bedrooms based on number of dependents. The same junior enlisted living in private sector housing off-base may only be able to afford a rental apartment, usually with a lesser number of bedrooms. Privatization projects located on base require that developers build housing units, using market standards, but also equivalent to existing on base housing in type and number of bedrooms. To do otherwise would unfairly penalize service members living in on base privatized housing when compared to those living in government constructed housing on the same base. This discrepancy in housing that now the sevicemembers pay for as compared to what the developer is required to build further increases the development gap.

The third factor that affects the development gap is based on unique risk, which is inherent to financing large housing projects on military bases. Private sector lenders are experienced in assessing the normal economic risks involved in housing development. However the risk associated with governmental actions (e.g., base closure, downsizing, or deployment) which might reduce the number of available occupants introduces uncertainty and can affect the availability, cost and amount of private sector financing. This either adds to project cost or decreases the amount of available financial resources, further adding to the development gap.

The tools provided under the Housing Privatization law allow us to bridge this development gap. The most financially complex authority is the direct government loan. It is also a very efficient method to close the development gap. The primary advantage of
direct loans is that the amount of the loan is scored in the budget at a subsidy rate (normally 50-70%) determined by the interest rate and terms of repayment.

A second financial method to fill a development gap is to provide a government equity investment. This method avoids some of the complexity involved in creating loan documents and credit monitoring, but is scored as the total amount of the investment and thus does not offer the same up front budget savings that use of a loan does. However, the government becomes a limited partner in the project and has the ability to create control mechanisms not available through use of the loan authority. The government also has the ability to share in any profits produced by the project. This authority is a central factor in the Navy projects.

Lease or conveyance of property and transfer of existing units are two more authorities which are essential to making the projects work financially. Providing good existing units to a projects can increase the developer’s rental income stream (and hence the availability of private financing) without significantly increasing the development cost. Likewise, provision of property or housing stock can provide income to a developer, which offsets any development gap.

The ability to provide Differential Lease Payments (DLP’s) is another authority which increases the income stream available to the developer, thus enabling more private sector financing and eliminating potential development gaps, without placing a burden on the military member through higher rents. The Navy has proposed use of DLP’s with some of their investment deals. DLP’s are scored as a net present value of the contractual commitment and are thus costly in budgetary terms.

Loan guarantees covering base closure, downsizing and deployment are necessary in some markets to reduce risk based on these governmental actions as described earlier. When necessary, these guarantees ensure the availability of private financing and lower borrowing costs so that project income streams are sufficient to service that financing.

These guarantees do not protect the lender from the standard risk of economic failure – the lender assumes and mitigates that risk through its underwriting policies. Other authorities help structure the housing privatization projects in ways that don’t
directly affect the initial development gap, but which reduce expenses over the life of the project. The ability to build in conformance with similar local housing units releases these projects from restrictions historically associated with military construction and allows private developers to achieve greater economies of scale, both in labor and material costs. Constructing to local standards results in a more cost-effective development and therefore a higher quality project. Additionally the privatization authorities allow ancillary supporting facilities, such as play areas and jogging trails, to be included in these projects to enhance the quality of life of the residents. DOD is interpreting this authority narrowly to mean facilities directly related to the housing and not widespread commercial development. Three authorities simply enhance execution of the projects once they are awarded. The first two of these allow requiring rents to be paid by allotment and allow assigning members to the units. Use of these authorities provides stability to the rental income stream and enhances private sector financing as well. We also have an interim lease authority that allows service members to occupy units incrementally in advance of conveyance as opposed to waiting for completion of all units in a project.

Lastly, two authorities (build to lease and occupancy / rental income guarantee) are used to either lease units directly from a contractor or guarantee occupancy. These authorities require the entire life cycle value of the contract to be budgeted up front.
D. BASIC ALLOWANCE FOR HOUSING (BAH)

Defense Department traditionally gives housing allowances to certain service members when on-base military family housing is not available. Service members then exercise their own discretion in purchasing or renting accommodations, in the surrounding community, that fit their budget and needs. BAH is funded through the annual Military Personnel (MILPERS) appropriation.

The purpose of the Basic Allowance for Housing (BAH) program is to provide uniformed service members accurate and equitable housing compensation, based on housing costs in the local civilian housing market near installations, and is payable when government quarters are not provided or available. Since the goal is to help members cover the costs of housing in the private sector, rental-housing costs in the private sector are the basis for the allowance. DoD determines the correct housing allowance to enable members to afford suitable rental housing within a reasonable distance of their duty location. For BAH purposes, “reasonable commuting distance” is
defined as generally within 20 miles or one hour drive with rush hour traffic. The allowance amount is based on geographic duty location (by installation zip code), service member pay grade, and dependent status. (BAH Primer, 2002)

1. **Out-Of-Pocket (OOP) Expenses**

BAH is designed to be fair for all service members in all locations in the United States. Although housing costs and BAH rates vary by location, average out-of-pocket costs are designed to be the same for members of the same rank with typical rental expenses. The typical service member in a given grade and dependent status who arrives at a new duty station will have the same monthly out-of-pocket costs regardless of the location. For example, if the out-of-pocket cost for a typical E-5 with dependents is $106, the typical (median) E-5 with dependents can expect to pay $106 out-of-pocket for housing if assigned to Miami, New York, San Diego, or any duty location in the United States. (BAH Primer, 2002) However, for a given individual, the actual out-of-pocket expense may be higher or lower than the typical. For example, a service member who chooses a bigger or more costly home than the median will spend more out-of-pocket. The opposite is true if a service member chooses to occupy a smaller or less costly home. Only for the member with median costs do we say that out-of-pocket expense is the same for a given pay grade and dependent status in any given location. (BAH Primer, 2002) In his fiscal year 2002 Management Agenda, published by the Office of Management and Budget (OMB), President Bush proclaimed, “The Administration is committed to reducing to zero by 2005, the average out-of-pocket expense of military families living in private housing in local communities. This will enable more military families to leave inadequate government housing and rent quality private-sector housing in the local communities around DoD’s installations.” (President’s Management Agenda, 2002)
<table>
<thead>
<tr>
<th>Fiscal Year</th>
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<tr>
<td>FY-05</td>
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Table 2-1: Out Of Pocket Expense Ratios of Total Housing Cost

2. **Higher BAH Makes Privatization More Attractive**

As BAH rates are increasing under the out-of-pocket elimination initiative, both developers and the services should find MHPI projects more feasible. Rising BAH reduces the need for DoD’s equity or loan contributions at project inception. With higher anticipated future cash flows from higher tenant BAH rates, private developers may find more private equity and loans available to them, at lower interest rates. This condition shrinks the development gap, reducing DoD’s upfront financial contributions to the project, decreasing budget scores, and increasing leverage ratios, making more financial resources available to fund other service priorities.

3. **Higher BAH Reduces the Need for MFH**

Ironically, while higher BAH rates make MHPI projects more attractive to developers, and more feasible for DoD and installation leaders, they may also reduce the need for MFH. This phenomenon is explained through basic economic supply-demand theory. The potential effects of higher BAH rates are most dramatic near installations located in normal, functioning real estate markets (Hawaii, Monterey). Although higher BAH rates may have little or no effect in isolated locations, or in areas with severe building restrictions due to land or water shortages.

4. **Higher BAH Rates Make Private Rental More Affordable**

The BAH initiative seeks to eliminate the cost differential between MFH and Private Housing by 2005, making off base rentals more affordable. Many service members, who
previously sought on base housing, may now prefer and opt for a rental unit in the local private sector market, reducing the demand and need for DoD sponsored MFH, either MILCON or MHPI units. (GAO -01-684)

E. BUDGET SCORING

The Budget enforcement act (BEA) of 1990 and the Federal Credit Reform Act (FCRA) of 1990 redesigned Federal budgeting and spending processes and were intended to limit spending and eventually reduce the ballooning Federal deficit. Congress, when authorizing money, and Federal agencies, when requesting funding, would have to include the sum of all future obligations in the budget year in which the program was authorized. Essentially, a current Congress cannot commit future congressional appropriations by authorizing funds for a long -term project without providing all/most of the funds in the year of authorization. Budget scoring dramatically changed the MFH landscape.

1. Budget Scoring Defined

The process of scoring or “scorekeeping” determines whether the total cost of a long-term program (or how much of the total cost) is charged against the Federal budget in the program’s first year, or whether those program costs are spread out over the life of the program. Scoring/scorekeeping is the percentage of dollar value, from 0% to 100%, of a project’s cost that must be allocated to an agency’s budget in a given fiscal year. Therefore, if a project cost of $1 million is scored at 10%, then $100,000 of the agency’s budget authority for that year must be used to cover the assessment. The remaining $900,000 is applied to future years’ budgets, based on the scoring for each years’ commitments. A score of 100% would mean that all $1 million would have to be covered by the agency’s budget authority in the designated year, even if the contract called for actual payments of $50,000 per year, for 20 years. (Else, 2001)

2. Budget Scoring for MHPI Projects

Each of the authorities created for the MHPI has an associated budget score. The scoring used for the MHPI was drafted to comply with the Federal Credit Reform Act of 1990 and the Budget Enforcement Act of 1990, as interpreted by Office of Management and Budget (OMB) Circular A-11 and specific MHPI Guidelines issued by the OMB on
June 25, 1997. These guidelines remained in effect for the first 20 projects using MHPI authorities, and will then be adjusted to incorporate lessons learned. The budget scoring percentages are calculated based on the Government’s “degree of exposure”, or the statistical probability that a contractor’s default on the project will have a financial impact on the Federal budget/deficit. (Else, 2001)

Because of budget scoring, the MHPI tool or tools selected for employment in any given housing project have a significant influence on project’s budgetary impact. The amount of budgetary authority that must be allocated to a project is a direct function of those alternative authorizations selected for use. (Else, 2001) Appendix H arranges the twelve alternative authorizations in ascending order of budget impact and indicates those authorities used in the first sixteen MHPI projects with awarded contracts.

Budget impact of the use of various authorities ranges from none, through moderate to high. Examples include:

a. **Zero Budget Score**: conveyance of non-revenue producing land or existing housing units to private developers. Because base land and existing housing units produce no revenue stream, and therefore have no impact on budget surpluses and deficits, the Budget Enforcement Act require that conveyance be scored at 0%, regardless of the market value of such real property.

b. **4-7% Budget Score**: provision of a loan guarantee. This scoring is calculated based on the Government’s “degree of exposure,” or the statistical probability that a default on the project by the private contractor will have a financial impact on the federal deficit.

c. **30-40% Budget Score**: direct loan to a contractor. This scoring is calculated based on the Government’s “degree of exposure,” or the statistical probability that a default on the project by the private contractor will have a financial impact on the federal deficit.

d. **70-100% Budget Score**: guaranteeing a minimum tenant occupancy rate. This scoring assigns the Net Present Value of the annual BAH for the total number of tenants.
Because of budget scoring, the MHPI tool or tools selected for employment in any given housing project have a significant influence on its budgetary impact. The amount of budgetary authority that must be allocated to a project is a direct function of those alternative authorizations, either singly or in combination, that are used. Figure 2-2 demonstrates alternative options for the use of authorities to fund a hypothetical MHPI project and their budgetary impact.

![Figure 2-2: Project Financing Example](image)

In this example, a hypothetical housing project requires capitalization of $40 million in order to build 400 new family units. The private real estate developer selected by DOD to construct and manage the housing invests $4 million of his own money
(private developer equity) and is able to arrange an additional $30 million in mortgage financing through private banks. In order to complete the necessary funding for the project, the Department of Defense commits itself to cover the remaining $6 million value. This example presents four different ways that this can be accomplished using MHPI authorities, illustrating four very different effects on the DOD budget.

**Option 1**

In Figure 2 is a direct loan from the Federal Government to the developer. Under budget scoring rules, the $6 million loan is scored at 50%, and $3 million must be allocated to the project from the annual DOD budget.

**Option 2**

Consists of conveying $6 million of market-value military family housing and land to the developer for his own use, perhaps as collateral for additional private financing for the project. Although this represents the loss of real property to the Federal inventory, it has no effect on the size of the Federal budget deficit, and budget scoring rules establish its impact on the DOD budget at $0. Therefore, no budget authority need be allocated to the project from the annual DOD budget.

**Option 3**

Offers Differential Lease Payments (DLP), direct cash rent subsidies, to the developer to make up the difference between what Service members would pay (the amount of their BAH) and local market rents for equivalent housing. Because this increases the commercial value of the project above that of straight BAH payments, the contractor may be able to secure better terms for his private funding. Budget scoring requires that the Net Present Value (NPV) of DLP be allocated against the DOD budget. In this example, the calculation incurs a $5 million budgetary burden.

**Option 4**

Illustrates the Government taking a $6 million equity (entering into a partnership) in the development project. Budget scoring rules require that an investment of this type be scored at 100%.

Therefore, four different alternative authorities used to cover the same $6 million development gap in a construction project can have four different impacts on the DOD
budget. In creating a real MHPI project, these authorities can use singly or in any combination. (Appendix A arranges the twelve alternative authorities in ascending order of budget impact. Appendix B explains the twelve alternatives.)
III. AIR FORCE, ARMY AND NAVY MHPI APPROACHES

A. OVERVIEW

As part of their commitment to improving the quality of life for service members and their families, the Army, Navy, and Marine Corps are committed to eliminating inadequate family housing by the end of fiscal year 2007; the Air Force will reach that goal within the continental United States in 2008 and overseas by 2009. Each military department has developed a Family Housing Master Plan that outlines, by year, what needs to happen to achieve these goals within the Department’s $4 billion annual budget for military housing.

![Number of Inadequate Family Housing Units (in thousands)](image)

**Figure 3-1: Number of Inadequate Family Housing Units.**

Each Service created a plan for a series of innovative campaigns that orchestrated the management of assets, the distribution of family housing resources, and sequencing of investment projects. The goal would be accomplished through a combination of:

1. Traditional Military Construction (MILCON)
2. Basic Allowance for Housing (BAH) increases
3. Privatization

Across the Services, the basics of most housing deals remain the same. The Services agree to turn over up to 50 years worth of housing dollars in the form of BAH to commercial developers in exchange for building, maintaining, and managing housing on military installations. Developers can use this guaranteed income (BAH from military
members) to borrow millions of dollars from banks and other financial institutions. The contractors get a return on their investment with a profit by collecting housing allowances for as long as five decades.

Throughout the implementation phase of the MHPI discernable patterns have emerged as each service component uses the flexibility the twelve authorities provided to pursue its unique MFH vision. The Air Force is taking a tentative approach, insisting all MHPI projects be ‘severable’ from the main installation, while still relying on MILCON for the majority of its housing needs. The Army is focusing on large installation privatization efforts under a whole-community concept and relying on MILCON at most of its smaller installations. The Navy is using Public-Private Ventures in an effort to obtain maximum financial returns for its housing investments and shorter contracts to maintain flexibility. The service components’ long-term strategies are outlined below and serve as the basis for analysis. Note that MHPI applies only to military installations within the United States and its territories and possessions, not to installations located in foreign nations.

B. AIR FORCE

The Air Force Center for Environmental Excellence (AFCEE) administers the MHPI for the Secretary of the Air Force through their Housing Privatization Office (HPO). The AFCEE-HPO describes its plan as a program that matches Air Force requirements to real estate market opportunities to provide the best value housing, maximizing developer creativity, and returning a transaction with a high potential for successful completion. Under this MHPI plan, private developers own the housing units, located on private land or land leased from the Air Force, and Air Force personnel receive BAH and pay rent to the private developer. Rents are less than BAH rates, with the difference accounting for a utility allowance, designed to keep out-of-pocket expenses at zero for the average tenant. The developer manages and maintains the property for 50 years. Tenants pay utilities directly to the utility provider without government or developer involvement. (AF-HPP, 2004)

The Air Force uses three criteria to determine the appropriate investment strategy for revitalizing housing at each base. If all criteria are met, privatization is generally
selected. If any one of the three criteria is not met, the traditional MILCON option is generally selected.

1. **Severability.** The Air Force requires privatized family housing to be physically separate (either geographically separate or severable) from other installation functions. To be eligible for privatization, it must be possible, but not required, to place a fence around the housing area and to obtain access to the area from a public road. This ensures that if, at a later date, the demand by military families is insufficient to fill housing, alternate civilian renters could access the housing estate without entering the operational portion of the installation. (AF-HPP, 2004) This is a significant difference between the Air Force’s MHPI approach and that of the Army and Navy.

2. **Economic Feasibility – ‘Scored’ Cost.** The privatization candidate must obtain the minimum three to one leverage ratio required by DoD policy. The scored cost, under OMB guidance, cannot exceed one-third of the estimated MILCON cost to complete a project of identical scope. (AF-HPP, 2004)

3. **Economic Feasibility – Life Cycle Costs.** The LCC associated with privatization must be less than the LCC for an identical MILCON project. The Air Force defines the MHPI LCC as the sum of the OMB scored costs and the net present value (NPV) of the expected BAH paid to service members living in the privatized units. Government ownership LCC is the sum of the MILCON construction costs and the NPV of all estimated future costs for maintenance, repair, utility, management and any other services provided over the life of the units. (AF-HPP, 2004)

Although the Air Force believes MHPI is a key element to eliminating inadequate MFH, it intends to use traditional MILCON methods to accomplish most of its MFH revitalization. MILCON will renovate 45,650 units or 71% of the remaining inadequate units inventory. Host Nation construction programs in Japan and South Korea will revitalize an additional 3,398 inadequate units, with traditional MILCON used for other overseas requirements, mainly in Germany, Japan and South Korea. After completing all MHPI projects, 34,364 MFH units will reside under privatization, representing 30% of the total Air Force MFH inventory, having served to upgrade about one-third of the originally inadequate units. The Air Force plans 251 construction and renovation
projects, with 36 (14%) being MHPI and 215 (86%) being MILCON. (AF - HPP, 2004)
The Air Force averages 968 units per MHPI deal. Major General Earnest Robbins, who
oversees the Air Force’s MHPI program, admits that his service’s more tentative
approach to MHPI precludes it from meeting the DoD OSD guidance to eliminate
inadequate MFH by 2007. He expects the Air Force to eliminate inadequate housing by
2010, primarily due to predicted MILCON funding shortages necessary to upgrade Air
Force owned/operated units. Robbins says the Air Force prefers a “balanced approach,”
preferring privatization only at bases located in strong commercial housing markets, and
intending to reinvest savings from MHPI projects into other MILCON projects. Robust
commercial housing markets ensure the Air Force and developer could easily obtain
civilian tenants or sell the housing units if the Air Force no longer needs them. (Cahlink,
2001)

The Air Force plans to privatize a total of 34,364 units under 34 different MHPI
projects, representing 30% of its total MFH inventory. In 2004 the total Air Force
housing inventory stands at approximately 104,937 units, including 64,239 Air Force
owned and operated, 14,100 Host Nation owned and 26,598 owned by MHPI partners.
The total Air Force MFH inventory of 104,937 units included some 40,000 inadequate
units worldwide. So far in 27 projects 26,598 units have been conveyed as part of the
MHPI projects. Revitalizing the remaining inadequate units was estimated to cost $5
billion through traditional MILCON methods, and would take at least 20 years at current
funding levels. (See Appendix C for list of approved Air Force Projects)

C. ARMY

After several studies, the Army chose Residential Communities Initiative (RCI) as
its program. The goal of RCI is to eliminate inadequate Army housing in the United
States by 2007. The three main objectives are:

1. Create world class, quality residential communities
2. Leverage assets/scarce funds
3. Obtain private sector expertise, creativity, innovation and capital.
Under the umbrella of the Residential Communities Initiative (RCI) the Army’s whole base concept seeks to develop entire communities, not just housing units. The Army establishes long term (50 year) business relationships with private sector developers for the purpose of improving entire base communities. Within this holistic approach, one developer hired the same architect who designed the Olympic village for the summer games in Sydney, Australia. The Army provides long-term interests in the form of both land leases and existing MFH asset conveyance to the developers. In turn, the developers become whole-community managers and receive tenants BAH as rent.

Under the RCI, the Army will establish long-term business relationships (usually 50 years) with private sector developers for the purpose of improving military family housing communities. The Army will provide the developer a long-term interest in both land and family housing assets. These developers will become the master community developers for the Army community. The primary source of financial return for the developers will be the revenue stream generated from the military personnel’s basic allowance for housing (BAH) which will be paid as rent. The Army-developer relationship is not essentially a contractual one. When the Army RCI PM speaks of “long-term business relationships,” he is describing limited liability corporations or a limited liability partnership.

The Army has developed an aggressive privatization program. The current plan for the Army includes 34 RCI Projects to be transferred to Residential Community Initiative partners by 2007. Additional installations continue to be evaluated for privatization that would expand the program to 45 installations (95 percent of government owned Army Family Housing in CONUS). The Army maintains a worldwide inventory of 122,977 MFH units, and predicted a need for 127,048 units by 2009. The AFH inventory for FY 2003 is 93,435 owned units, 15,727 privatized units, and 13,815 leased units. These 122,977 units are located at 112 installations in the United States (91,193 units), Europe (28,360 units), Japan (981 units), Korea (1,774 units), and 669 units leased at various locations worldwide. About 80 percent (73,477 units) of the US owned inventory of 91,299 units will be privatized. The current Army Family Housing Master Plan contains about $560 million for government equity contributions to support
privatization projects from FY 2002 through FY 2005. The breakout of requirements is $143,0 million, $153,5 million, $120,4 million and 142,7 million in FY 2002 through FY 2005, respectively (AFHMP 04-09).

Although its first MHPI contract was not awarded until September 1999, the Army has fully embraced housing privatization as the best way to solve the MFH problem, quickly and efficiently. The Army is moving forward rapidly with plans to entirely privatize most of its large installations, eliminating all inadequate MFH by 2007. The Army plans MILCON projects at overseas locations and smaller CONUS installations. The Army averages 2,564 MFH units under each MHPI contract (AFHMP 04-09).

The Army will invest approximately $224 million from AFHC funds in the first 12 projects, and the developers will provide over $4.25 billion in private capital during the initial development period (4-10 years). Private capital consists of developer equity and debt underwritten by the BAH income stream, (debt being the main source of financing). (See Appendix D for list of approved Army Projects)

![Diagram showing the Army's contribution versus initial development]

**Figure 3-2:** The Army’s contribution versus initial development

**D. NAVY AND MARINE CORPS**

The Navy pioneered the MHPI effort in 1994 when it obtained authority from Congress to create Public-Private Ventures (PPV) as a way to correct its housing problems. The PPV authorities, originally granted to the Navy only, were included in the
1996 MHPI legislation and made available to all services. Under this venture, a private company (typically a limited liability company) builds, maintains, and manages family housing communities in a partnership with the service. The Navy and Marine Corps view privatization not only as a way to improve housing, but also as an investment opportunity. By forming limited liability companies with developers, the PPV arrangements require the Navy to accept a greater financial burden, but enable it to share in the revenues generated by the project. (Cahlink, 2001) The Navy’s revenue share is negotiated up front and may be used for repairs, reserve accounts, or for housing needs at other Navy locations. The limited liability companies can be used for developing housing on Navy bases and Government land, as well as on private land. The partnerships include many of the features pursued by other services, such as using housing allowances to pay for on base housing. But the agreements also make use of other Congressional authorities, such as allowing the services to invest in non-government entities and convey excess land to private developers. These deals do not allow the land to be sold and are often 50-year arrangements that end with housing transferred back to the Navy and Marine Corps (Cahlink, 2001).

While some Navy deals are for 30 to 50 years, with the housing reverting to Navy control at termination, some are also much shorter, with provisions to sell the property on the open real estate market. The shorter deals, at smaller bases and encompassing fewer units, are for ten to fifteen years and allow for the sale of individual units as early as the sixth year of operations. Current residents have purchase priority and may be offered reduced closing costs and relief from real estate commissions. When the deal reaches full term, the PPV liquidates the remaining units on the open market. Because it is a full business partner in the PPV, with a significant financial stake, the Navy receives a substantial portion of the liquidation proceeds if there is any. These proceeds may be reinvested in another local PPV if a housing shortage still persists, or they may be invested in a PPV at a different Navy base with MFH shortages.

There are several key features to the PPV according to the Navy-Marine Corps. These features include:

1. Zero out-of-pocket expenses to the service members
2. Military construction quality or better for the privatized housing
3. The elimination of the renovation/replacement backlog
4. Guaranteed operation and maintenance in the long run
5. Future renovations/replacements will be fully funded by a given project
6. Services reserve accounts are established to fund future uncertainties
7. The services participate in all key management decisions

Navy predicts a housing need for 68,499 units by 2005. Revitalizing the inadequate units was estimated to cost $3.8 billion using solely traditional MILCON funding and would take at least 20 years to complete. (Navy - FHMP, 2001) By 2005, the Navy plans to complete 18 PPV deals at eleven bases, with some bases having two or three different PPV contracts to account for all of the privatized housing. (Navy-FHMP, 2001) The Navy plans to convey 8,669 adequate units to PPV between 2001 and 2010. PPV renovates 5,144 inadequate units (27% of 18,801), while MILCON renovates 13,657 units (73% of 18,801). New PPV construction replaces 3,739 (67% of 5,569) demolished units, while MILCON replaces 1,830 (33% of 5,569) demolished units. PPV and MILCON will demolish and not replace 3,373 inadequate units at bases with excess capacity. Between 2001 and 2010, PPV reduces the overall MFH deficit at underserved bases by 3,844 units (88% of 4,361) through new construction, while MILCON reduces the MFH deficit by only 517 units. (Navy-FHMP, 2001) The Navy averages 1,221 units under each PPV agreement. These Navy figures do not include the Marine Corps MFH (Navy-FHMP, 2001). (See Appendix E for list of approved Navy and Marine Corps Projects)
IV. PRIVATIZATION FUNDS AND PREVIOUS ANALYSES OF COSTS AND BENEFITS

A. PRIVATIZATION FUNDS

1. MFH Programs Paid by MHPI Funds

Defense Department’s share within the Federal Government’s budget.

Figure 4 - 1: The Federal Budget

Congress funds the Defense Department’s budget through yearly appropriations. Since 1960, the Defense Department’s budget has been divided into seven appropriations titles:

1. Military Personnel
2. Operations and Maintenance (O&M)
3. Procurement
4. Research, Development, Test, and Evaluation (RDT&E)
5. Military Construction (MILCON)
The Family Housing title is sub-divided into four major functional categories:
1. Construction (New, Post-acquisition, Planning and Design)
2. Operations and Maintenance (including utilities)
3. Debt Payments
4. DoD Family Housing Improvement Fund (funds MHPI)

Both the new construction and the post-acquisition functional categories of the Military Family Housing appropriation title are specifically earmarked by installation and by project. (FMR, June 2002) Funding for the Military Housing Privatization Initiative is accomplished through two funds established by the 1996 authorizing legislation: the DOD Family Housing Improvement Fund and the DOD Military Unaccompanied
Housing Improvement Fund including in the former functional category. The funds can receive sums by direct appropriations and transfers from approved military construction projects and from proceeds from the conveyance or lease of property or facilities. The funds are used to implement the Initiative, including the planning, solicitation, award, and administration of privatization contracts.

2. MFH Programs Paid by MILCON and O&M Funds

Congress maintains significant visibility and control over funds that support traditional MFH. The yearly National Defense Authorization Act appropriates specific funds for each service component, for both family housing MILCON and family housing O&M. This MFH support funding is strictly separated from other MILCON and O&M funds, and must be requested for specific projects and specific installations.

MILCON funds are sub-divided by
- New construction and
- Major renovation projects.

O&M funds are sub-divided into several categories:
- operations
- utilities
- maintenance
- interest payments
- mortgage insurance
- currency fluctuations
- reimbursements

MILCON funds remain available for obligation for five years after appropriation, while O&M funds must be obligated in the year for which they are appropriated. Service components and installations have no freedom to redirect MFH funds to better meet their needs. Once appropriated by Congress, the funds must be used for that specific purpose for which they were appropriated and that purpose only.

3. MFH versus Private-Sector Housing

Within the last ten years, several studies examined the relative costs of on-base MFH provided through the installation commander, as compared to housing provided
through the private sector obtained from the local economy. Although the studies varied in their computations and percentage differentials, all studies concluded that on-base MFH is more costly than private sector housing provided to service members through housing allowances. The most comprehensive and frequently cited study is the CBO study, which computed the average annual long-term costs for comparable housing units. (CBO, 1993)

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**Table 4 – 1: Average Annual Long-Term Costs for Comparable Housing Units.**

This data indicates that, in aggregate, MFH is 41% more costly than its comparable private sector counterpart (9200 x 1.41 = 13000). DoD’s BAH initiative to eliminate OOP expenses by 2005 will make DoD responsible for the $1,700 paid by the service member. Although DoD’s proportion of the total cost will change, the comparative, aggregate costs will not change. The $1,700 paid by the service member would be under BAH title. Operations and maintenance includes utilities, minor repairs, and local housing management operations. Cost of capital is based on a 57-year service life, including construction costs and one major renovation. School impact aid is the difference between what DoD pays for students who reside on base but attend off base.
schools, and the increment paid for students who both live and attend school off base. Cost of land is an opportunity cost (3% of $16,000 per MFH unit) of the Federal government owning the land, but not benefiting from it. The $9,200 total cost of private sector housing includes all associated costs including real estate taxes, maintenance, utilities, land, depreciation and interest. (CBO, 1993)

In 1995, DoD spent $4.4 billion in housing allowances for 605,000 military families, covering about 80% of service members’ housing costs. That same year, DoD spent $2.8 billion to lease, operate and maintain 293,000 MFH units and $724 million (MILCON) to construct and renovate MFH units. (GAO, 96-203) Since then, the numbers have changed slightly, reflecting a smaller active duty force and a commitment to lower/reduce OOP expenses, but BAH still received a disproportionately small proportion of the total housing dollars whereas the on-base MILCON/O&M accounts received a higher proportion of the housing dollars. In 2000, DoD spent about $750 million (MILCON), from appropriated MFH funds, to replace or renovate MFH units, and $2.8 billion, from the services’ MFH O&M funds, to lease, operate and maintain the existing MFH stock. BAH payments totaled $5.2 billion. (BAH Primer, 2002) The numbers for 1995 and 2000 demonstrate DoD’s continued but declining skew towards on-base housing. In 1995, BAH accounted for 55% of the housing dollars, while accounting for 65% of the personnel. On-base housing, supported by MILCON/O&M funds, received 45% of the funding to support only 35% of the service members. In 2000, BAH accounted for 60% and MILCON/O&M consumed 40% of the housing dollars while the ratio of on-base to off-base personnel remained unchanged. DoD still spends disproportionately more money to house service members on base than it spends for off base housing allowances.

B. RELIABILITY OF COST COMPARISONS

Preparing accurate, reliable cost comparisons of projects financed by military construction funding or through privatization is difficult because the comparisons involve long-range projections and include many different costs, variables, and assumptions. For example, under military construction financing, the military pays the initial construction or renovation costs and then pays the annual costs to operate, maintain, and manage the
units. The military does not pay monthly housing allowances to occupants since the service members occupying the units forfeit their allowances when living in government-owned housing. In contrast, under most proposed privatization projects, the military initially uses some funds and/or conveys some existing military houses or property to secure a contract with a private developer. Since the housing is not government-owned, the military pays monthly housing allowances to the service members occupying the housing and some housing management costs for service member referral services and for oversight of the contracts, which in many cases is for 50 years.

1. **Modest Savings**

DOD notes that privatization provides an advantage over traditional financing by requiring less initial government funding to get housing constructed or renovated because the private sector provides most of the required funds. Current estimates also predict that most proposed projects will result in long-term savings to the government, although the average amount is modest—about 11 percent. However, such estimates are difficult to make with precision because they include many assumptions and cost estimates over long time frames. Before actual privatization costs and savings are known, several projects will have to be constructed, occupied, and operated over a period of time.

Questions that an analysis has to answer:

1. Will developers operate and maintain privatized housing in accordance with the contracts and in a manner that meets servicemembers’ expectations?

2. To increase profits, developers could limit maintenance and repairs and cut costs by hiring less qualified managers and staff and using inferior supplies. DOD plans to include maintenance standards, modernization schedules, required escrow accounts, and other safeguards in each privatization contract to help ensure adequate performance. However, enforcing the contracts could be difficult, time-consuming, and costly.

3. Will the housing will be needed over the life of the projects — typically 50 years. DOD housing officials stated that accurate forecasts of housing needs beyond 3 to 5 years cannot be assured.
Until several privatization projects have been implemented and occupied and experience is gained in the operation of these projects, these concerns and questions will remain largely unanswered.

2. The Services’ Life-Cycle Cost Analyses Lack Consistency and Reliability

DOD’s draft guidance regarding performing life-cycle cost analyses generally identified the costs that should be considered in the analysis of each alternative. However, the guidance did not include details on how the estimates for each type of cost should be determined. For example, details were not provided on how the costs of the contribution of government housing units or other property should be determined. Because many proposed projects include the conveyance of government property to the developer and the valuation of these assets can be critical to the outcome of the overall analysis, detailed guidance in this area could help ensure more accurate and consistent analyses. DOD officials stated that for a proposed privatization project to be approved, the government’s estimated total costs in present value terms for the project normally should be equal to or less than the total costs for the same project financed by military construction funding. The officials stated an exception to the guideline could be approved under some circumstances, such as when the total cost difference between the options was small but substantially less initial government funds were needed to construct the project under privatization. However, DOD had not developed definitive guidance for when an exception could be approved. As a result, DOD could not ensure that approval decisions for privatization projects with total costs exceeding military construction costs were made in a manner that consistently determined what was in the government’s best interest. Overall long-term projected savings from privatization are modest. Also, because of the deficiencies in the services’ analyses and because DOD had not provided guidance on the circumstances that would justify approving privatization projects that would cost more than comparable military construction projects, DOD cannot ensure that approval decisions for proposed privatization projects are made in a manner that consistently determines what is in the government’s best interest.
The life-cycle cost analyses prepared by the services to compare proposed privatization and military construction projects were inconsistent, inaccurate, and lacked support for some assumptions. For example, some analyses did not consider project planning costs. Although the amount of government funds needed to initiate housing projects under the privatization option can be substantially less than needed under the military construction option, this does not necessarily mean that the government’s long-term total costs for the projects also will be less under privatization because annual costs differ under each option. To estimate and compare the government’s long-term costs for proposed projects financed through privatization and military construction, the services prepare life-cycle cost analyses and use the results to help decide whether proposed privatization projects should be approved for solicitation.

GAO found that analyses with the services’ analyses for 14 projects approved for solicitation, were associated with inconsistencies, inaccuracies, and lack of support for some assumptions and estimates in every completed analysis. For example, seven analyses did not consider costs for project planning and design, three analyses did not consider the value of government property conveyed to the developers, two analyses included the value of conveyed property but did not provide supporting documentation for the estimates used, six analyses did not include costs for monitoring the privatization contract, two analyses did not use the correct Office of Management and Budget discount rate to adjust for the time value of money, and no analyses were performed for two projects.

GAO review of the 12 life-cycle cost analyses for the 12 projects that had a life-cycle cost analysis prepared by the services indicates that the long-term savings to the government from privatization will be modest. The services estimated for these projects that privatization, on average, should cost the government about 12 percent less than military construction financing. After recalculating costs, making adjustments to the services’ estimates to provide consistency, considering all project costs under both options, and correcting other problems, GAO found that privatization, on average, should cost the government about 11 percent less than military construction financing. For 10 projects, the estimated savings ranged from 38 percent to 5 percent. For two projects,
Robins Air Force Base and Stewart Army Subpost, GAO estimated that privatization would cost more than military construction—about 9 percent and about 15 percent more, respectively. DOD officials stated that these projects were still in the best interest of the military because with privatization, the housing improvements could be completed faster and with substantially less initial government funds.

<table>
<thead>
<tr>
<th>Estimated savings</th>
<th>Military construction option</th>
<th>Privatization option</th>
<th>Difference</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Services’ estimate</td>
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<td>$2,755</td>
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<tr>
<td>Average project cost</td>
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<td>$230</td>
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<tr>
<td>GAO estimate</td>
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<td>10.9</td>
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<tr>
<td>Average project cost</td>
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<td>$245</td>
<td>$30</td>
<td>10.9</td>
</tr>
</tbody>
</table>

Table 4 – 2: Comparison of Life-Cycle Cost Estimates for 12 Projects

3. **Guidance to Performing Life-Cycle Cost Analyses**

Joseph K. Sikes, Director of the Competitive Sourcing and Privatization Office, released a housing privatization life cycle cost policy memo on 11 February 2002. (See Appendix F)The stated purpose of the memo is to ensure identified costs are accurate, simple and consistent across the military services to facilitate appropriate comparisons between identical MHPI and MILCON alternatives. Specific guidance outlines LCC estimating methodologies including provisions for utility service, excess BAH recovery, out-year renovations, and project planning/inspections. An appendix to the memo provided the services with a standardized methodology for calculating consistent and
reasonable MILCON O&M costs. Sunk costs are defined as including government-owned land and improvement expenditures incurred before project approval and not recoverable regardless of the alternative selected.

4. **Examples of Life-Cycle Cost Analyses**

In its life-cycle cost analysis for the proposed privatization project at Camp Pendleton, for example, the Marine Corps compared estimates of the government’s long-term costs for the project financed through the initiative and with military construction funds. Under the privatization option, the developer would build 200 housing units, renovate 512 government housing units, and operate and maintain these units for 50 years and the government would convey 512 existing government housing units to the developer, lease the land for the housing to the developer for 50 years at no cost, provide for a portion of the project financing through a direct loan, and pay housing allowances to the military occupants of the housing. Under the military construction option, the government would pay for the construction or renovation of the 712 units and operate and maintain the units for 50 years. The Marine Corps’ analysis showed that privatization would cost the government about $28 million, or about 17 percent, less than military construction. However, our review found that the Marine Corps did not estimate and consider (1) the value of the 512 units to be conveyed to the developer and (2) the costs of project development and monitoring the privatization contract. The Marine Corps also incorrectly used different discount rates for the two options to adjust for the time value of money. After adjusting for these problems and recalculating the government’s costs under the two options, we found that privatization was less costly—about $11 million, or about 5 percent, less than military construction—but considerably less than the Marine Corps’ estimated savings of $28 million.

According to a Marine Corps official, a life-cycle cost analysis was not prepared for the Marine Corps Logistics Base, Albany, Georgia, project because the proposed project required no initial government funds. The military would convey to a developer 419 older, government housing units and a vacant hospital facility located off base. In return, the developer would construct 114 housing units on base and operate and maintain the units for 50 years. Military members occupying the units would receive housing
allowances and pay rent. According to the DOD draft guidance and to officials in the DOD office responsible for the initiative, a life-cycle cost analysis should have been prepared for this project.

C. CONCLUSION

Because life-cycle cost analyses use numerous assumptions and estimates actual costs and savings from implemented privatization projects will vary from the results of the analyses. Budgetary consequences from approved projects cannot be known until the projects are constructed, occupied, and operated for several years. Nevertheless, privatization has a relatively modest effect on total government costs because it shifts funding requirements from the military housing construction, operations, and maintenance accounts to the military personnel accounts to pay for additional housing allowances. Service officials have recognized this and have stated that the long-term savings to the government from privatization may be modest.
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V. PRESIDIO OF MONTEREY AND NAVAL POSTGRADUATE SCHOOL

A. OVERVIEW

Presidio of Monterey proposed to lease its entire inventory of 2,268 family housing units to a selected private sector partner. In exchange, the partner provides replacement housing, community amenities, new construction, demolition, long-term operation, management and maintenance, and rehabilitation of existing family housing. This agreement would exist for a fifty-year period with a twenty-five year renewal clause. On 9 July 2002, Congress awarded the Monterey family housing privatization initiative to Clark Pinnacle Family Communities LLC and approved the Community Development and Management Plan (CDMP) on 30 June 2003, worth $790.8 million during the initial development period (ten years) and up to $3.5 billion over the next 50 years. Clark Pinnacle Family Communities LLC is a joint business enterprise between Clark Realty and Pinnacle Realty Management Company. Headquartered in Bethesda, Maryland; the Clark organization is one of the country’s leading real estate companies and the largest privately held general building contractor in the nation. Pinnacle Realty Management Company is an international real estate investment management firm headquartered in Seattle, Washington. Pinnacle provides both multifamily residential and commercial real estate owners and investors with a broad scope of realty services, including the acquisition, disposition, rehabilitation, property management financing, and repositioning of real estate assets. (RCI Newsletter, October 2002) An innovative public-private partnership between the U.S. Army, U.S. Navy, and Clark Pinnacle has been formed to plan, program, develop, construct, and/or manage a total portfolio of approximately 8,000 military family housing units in three distinct military communities. Clark Pinnacle is currently working with the U.S. Army on development plans for family housing at Fort Belvoir in the Washington, D.C. area and Fort Irwin/Moffett/Parks Military Housing in California. As noted earlier, Clark Pinnacle recently partnered with both the Army and Navy on plans for military housing in Seaside, California. The Presidio of Monterey and Naval Postgraduate School venture is the first successful Army-Navy joint privatized military housing project. The Army, however, leads the privatization of military housing in Monterey through it’s Residential Community Initiative Program. The only contracts
involved in this corporate relationship are the $350,000 contract between the Army and Clark Pinnacle to produce a Community Development Management Plan and any commercial contracts the Corporation lets for specific supplies and services.

B. SCOPE OF THE MHPI

The Monterey Bay Military Housing (MBMH) LLC started fiscal year 2004 with the transfer of 2268 units, 1,675 from the Army and 593 from the Navy. It will demolish and not replace a 50-unit apartment building on the Presidio. The Defense Language Institute will use the land for instructional purposes. Eventually, as the units at La Mesa Village are demolished and replaced, they will be spread out a bit, yielding nine fewer units. After construction is complete, the MBMH LLC will own and manage 2209 units. Demolition and construction will proceed gradually over the next eight years. As a result, the new military housing communities will take shape slowly through 2012.

C. AUTHORITIES USED IN MONTEREY

MHPI project in Monterey uses the following three authorities:

1. The Army and the Navy made their land and existing housing available to Monterey Bay Military Housing, LLC for the new housing. All the existing housing will eventually be demolished and replaced.
2. The Monterey developments will also include ancillary facilities infrastructure, community centers, community swimming pools, etc.
3. Rent will be paid through allotment of BAH.

All three authorities are associated with 0% budget scoring: In effect, using the “free” MHPI authorities, Monterey’s RCI Program leveraged the Army and Navy’s equity in land and housing to “buy” 49% of Monterey Bay Military Housing, LLC, a limited liability corporation which then borrowed $450 million from private lenders to finance the new housing in Monterey and Seaside, California. The expected BAH and commercial rents represent the cash flow that justifies the loan. (Collier, 2003). That corporation then contracted with Clark Pinnacle Military Housing, LLC, to construct and manage new housing communities on the Presidio of Monterey, the Naval Postgraduate School, La Mesa Family Housing, and the Ord Military Community. Although land is expensive in and around Monterey, contributing the land and housing at Ord Military
Community, La Mesa Village, and Presidio of Monterey will have no impact on the defense budget. Because of budget scoring, DoD’s real property has no budgetary value. In contrast, had the Army and Navy contributed the cash value of the land and housing for their share in the corporation, the entire cash amount would have been counted as an expenditure in the year the contribution was made. This would have required a Congressional appropriation. (Else)

**BUSINESS ENTITY IN MONTEREY**

<table>
<thead>
<tr>
<th>Army/Navy</th>
<th>Clark Pinnacle Family Communities LLC</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Contributes Land &amp; Facilities as Equity</td>
<td>o Establishes the Business Entity – MBMH LLC</td>
</tr>
<tr>
<td></td>
<td>o Secures 1st Mortgage Debt</td>
</tr>
<tr>
<td></td>
<td>o Contributes Equity</td>
</tr>
</tbody>
</table>

**MONTEREY BAY MILITARY HOUSING, LLC**

<table>
<thead>
<tr>
<th>Navy/Army (Member)</th>
<th>Private Entity (Managing Member)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURPOSES</td>
<td></td>
</tr>
<tr>
<td>Finance, design, construct, acquire</td>
<td></td>
</tr>
<tr>
<td>Own, lease, convey, operate, manage, maintain, and/or renovate housing</td>
<td></td>
</tr>
</tbody>
</table>

**OPERATING AGREEMENT**

- Design/Build Contract
- Property Management Agreement
- Land and Facilities lease
- Asset Management Agreement
- Consulting Architect Contract

*Figure 5-1: Business Entity in Monterey*

**D. IMPLICATIONS OF BAH**

In Monterey the availability of private housing provides a real freedom of choice both legally and physically to the service members. Essentially the Army and Navy offered service members the choice of Government housing with BAH forfeited or full
BAH which service members could apply to housing in the commercial rental market. Under RCI agreement, service members can choose whether to live in privatized military housing or private-sector housing. If a significant proportion of potential renters choose to rent private-sector housing, due to recent increase of BAH, the developer’s financial projections may require rethinking. Sixty-eight percent of the service members at the Naval Postgraduate School and the Defense Language Institute chose to live in La Mesa or the Ord Military Community. At NPS significant numbers of international students are attending. The RCI agreement regarding the freedom of choice between privatized military housing and private-sector housing doesn’t apply to International Military Education and Training students. Under IMET the cost and expenses associated with training and educating an international student are provided as a military aid and paid for by the US. Military. According to earlier regulations all accompanied IMET students must live in government quarters (privatized military housing) if available within 45 days of arrival. (See Appendix G for guidelines given by IPO)

E. ACCESSIBILITY OF HOUSING

In Monterey, all the new housing, except for historic houses at the Naval Postgraduate School and the Presidio, is accessible to the public. In short, the economics of the Monterey project is certainly different from that of others. This opens the housing market to civilian tenants who might compensate for the loss of revenue due to low occupancy rate of military tenants. While in other cases, where military housing is on base, thus not accessible by civilians, land and existing housing alone may provide insufficient equity to attract corporate partners.

F. CASH FLOW FROM OPERATIONS

The average BAH for the Monterey area is $2000 per month, so the developer gains $2000 per month for every rented unit. Theoretically we can calculate with 2209 units, depending on when the Corporation demolishes the apartment building on the Presidio. Of course, that amount must be adjusted for uninhabitable units and for those under construction at any time. Depending on the dynamics of the program, it appears that on average 220 units will be under construction at any time. That gives us approximately 1980 revenue-producing units throughout the construction period.
units * $2000/unit/month = $3.96 million/month or $47.52 million/year. In the Monterey area approximately 3385 military personnel are eligible for BAH and military housing. On average each receives $2000 BAH a month, which totals up to 6.77 million a month, 81.24 million a year. For FY04 the Army’s entire family housing appropriation is less than $450 million. Congress would not appropriate $450 million per year for new housing in Monterey, but it is certainly willing to pay $81.24 million per year indefinitely.

**Figure 5-2: Cascade of Funds in MBMH LLC**
G. INCENTIVES FOR DEVELOPERS

If the entire amount of BAH was used for construction, property management, and servicing the debt, then the private-sector firms would have little incentive to participate in RCI’s public-private corporations. According to the Army RCI website fees that private sector developers and property managers can collect for participation in RCI programs are as follows:

- Property/Asset Management: 3% - 5% of gross rent for available units less vacant units.
- Development Management: 3% - 5% of total projected development cost.
- Construction Management: 3% to 6% of projected total “hard” cost of construction.

DoD and the contractor negotiate exact fees, including the automatic and incentive proportions, during development of the Community Development Management Plan (CDMP). The Army’s guidance suggests that a “material proportion” of Property/Asset Management and Construction Management Fees should be performance-based and that the entire Development Management Fee should be “at risk” if the developer fails to meet milestones. In Monterey the developer would receive 2/5 of the Property Management Fee as an incentive portion of the total fee. 2% is the maximum incentive that MBMH LLC can earn. Award of the incentive proportion is based on customer service, maintenance response, occupancy, budget, and quality of life, weighted equally. Projected costs for the basis of the Development and Construction Management Fees are determined during development of the CDMP. They are not actual costs.

H. RISK ASSESSMENT

1. Declining Occupancy Rate

The military housing occupancy rate in Monterey declined significantly from the launching of the project to the end of May 2004. This change has been discovered as the project moved forward. This lesson is unique to the Monterey project. While most installations maintain a lengthy waiting list for housing, the Monterey housing tends to have availability year-round. At Naval Postgraduate School (NPS), students graduate and arrive four times a year. Some graduation classes are larger than others. At Presidio of
Monterey (POM), students graduate and arrive every 6 to 18 months. The private contractor, Clark Pinnacle Family Communities LLC, must achieve a 95% occupancy rate to maintain financial success of the project. The present occupational rate is significantly lower than the targeted number. The contractor has offered one month’s free rent to all active duty military members, who are in a residential lease off base. Clark Pinnacle is also willing to pay up to two month’s penalties that may arise by ending a current lease (See Appendix H for Memorandum). Clark Pinnacle also applied to leveraging its bargaining power and changing its policy regarding the rate that unaccompanied students must pay for rent. Pinnacle Housing are not honoring the unaccompanied rate for unaccompanied IMET students and charging the accompanied rate thus creating a difference in what unaccompanied IMET students are required to pay for rent and what they are authorized to be reimbursed for. This prompted a change in the International Program Office’s policy regarding making mandatory for all IMET students to move in military housing. There is no longer a requirement for IMET students to live in Pinnacle Housing, which could contribute to further decline in military housing occupancy rate in Monterey (See Appendix I for Note).
### 2004 BAH Rates for Privatized Government Housing

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Table 5-1: BAH Rates for Privatized Government Housing, 2004

2. **Falling Retention**

Another factor that affects Army’s RCI is inherent to the very basic tasks of the military, but often ignored in peacetime. That is the unique risk associated with any government action that might reduce the number of potential occupants. In the first six months of FY04, the retention rate fell 10 percentage points. From Oct. 1, 2003 through March 31, 2004, the Army met only 96 percent of its goal of keeping 25,786 soldiers who were eligible to leave. For FY03, the retention figure was 106 percent. Assuming the same target goal for FY03, this translates 2579 fewer eligible occupants for Military Housing nationwide. The Presidio of Monterey is home to the Defense Language Institute Foreign Language Center (DLIFLC), which is the primary foreign language training institution within the Department of Defense. The combined Army-Navy MHPI in Monterey encompasses the Presidio of Monterey where some 25 languages are taught including languages as Modern Standard Arabic, Persian-Farsi, Pashto, Dari, with which US. Servicemen can meet only during increased risk operations (Operation Enduring Freedom, Operation Iraqi Freedom). We still don’t know the effects of the drop in retention rate on demand for Military Housing in the Monterey Area, but can assume that it might have a significant one in the long run, especially among enlisted linguists.
I. BENEFIT AND COST ASSESSMENT

1. Consequences of planning exclusively on historical experience

MHPI was initiated and launched in Monterey based on historical experience related to Military Family Housing and ignoring the fact that another initiative has been launched simultaneously. Approximately 68 percent of married service members on the Peninsula lived in Military Housing – the highest percentage in the country. Before the start of the Army’s RCI evidence of long waiting lists at the Monterey military housing office indicated that with the demand for Military Housing that percentage might have been higher had more housing units been available. Brad Collier, Deputy Program Manager for Monterey’s RCI office, reports that a Housing Needs Assessment of the Monterey Area indicates the need for more than 2,209 units but that DoD’s land will support no more housing units. (Collier, 10/29) Since than the military housing occupancy rate in Monterey declined significantly and there is an increasing availability all year round. This was the result of another initiative launched simultaneously and not coordinately with the MHPI. In his President’s Management Agenda for FY2002, President Bush reiterated his commitment to reducing average out-of-pocket expenses for housing to zero by 2005. “This will enable more military families to leave inadequate government housing and rent quality private-sector housing in the local communities around DoD installations.” As a result of increased BAH and the requirement that all occupants of Privatized Military Housing assign their entire BAH to the Clark Pinnacle Family Communities LLC as rent, larger percentage of military personnel elected not to live in Privatized Military Housing. Service members’ choices may change as BAH approaches and equals commercial rents in the area. That in turn leads to higher vacancy rates, jeopardizing the profitability of the corporation.

2. Opportunity Cost of Civilian Tenants

In expectation of vacancies civilians are expected to occupy some percentage of Clark Pinnacle’s Military Housing due to the fact that all new housing, except for historic houses at the Naval Postgraduate School and the Presidio, is accessible to the public. When developing housing privatization projects, experience has shown that the total funds available in developer equity and available private sector financing is normally less
than the total development cost. This dynamic creates a development gap which must be filled by government contribution. Using different authorities DoD can provide this contribution with the conveyance or lease of land and existing housing units, direct loans, loan guarantees, investments in nongovernmental entities. The percentage of civilian occupation of vacant housing determines the opportunity cost of not using DoD funds and financial resources to finance military or military related activities. In Monterey the RCI PM offered the land and buildings in the Army’s Ord Military Community and the Navy’s La Mesa Village as equity for its 49 percent share in a public-private cooperation, called Monterey Bay Military Housing LLC. It is unclear how the conveyance of land and existing housing has been valued and monetized in the partnership agreement. If we assume that the value of conveyed property is approximately $100 million and further assume that 10 percent of the housing units would be offered to civilian occupants, than $10 million is the opportunity cost of the transaction. This is the amount that could have been spent on military or military related activities rather than on satisfying civilian housing needs, had the military sold the appropriate number of housing units and acre of land to the market. The Army and Clark Pinnacle worked together to craft a Community Development and Management Plan (CDMP). Clark Pinnacle was paid $350 000 for the CDMP. Similarly, assuming 10 percent civilian occupancy rate in the Privatized Military Housing, than $350 000 * 10 % = $35 000 would go to civilian housing with which DoD has nothing to do, let alone to finance it.

3. Cost Plus Percentage of Cost

There are dangers and unintended consequences of basing a contractor’s fee on the actual or projected costs of a project. The RCI Program Financial/Fee Information, describes the Development Management Fee as “. . .between 3% and 5% of the total development costs. The amount included in total development costs will be agreed upon during the development of the CDMP. . .” Similarly, the Construction Management fee is “. . .3% to 6% of the total hard cost of construction. A material portion of this fee should be performance based. The amount included in total hard cost will be agreed upon during the development of the CDMP for the project. Cost plus percentage of cost contracts encourage a contractor to run up costs in order to increase his fee. RCI’s fees are not
based on actual costs; they are based on projected costs. So, instead of encouraging a contractor to incur actual costs, RCI encourages a contractor to inflate his cost estimates during the preparation of the CDMP. The incentives in the fees also encourage the contractor to inflate his estimates. When the contractor incurs less than his estimates, he earns incentives for cost under runs. Without competition, there are no other contractors’ estimates with which the winning contractor’s estimates can be compared.

4. **Income Implications of BAH**

Increasing BAH rates is an effective method to increase overall compensation to most service members. Since BAH is not taxed at any level, every dollar of BAH increases represents one additional dollar of benefit available to the service member. BAH increases directly benefit the two-thirds of all military families who live off base whether they actually spend the additional BAH on housing–related expenses or other family priorities. Service members living in MFH may not benefit from BAH increases. Those living in traditional MILCON housing will not benefit from higher BAH rates because their MFH is not funded through BAH. Those living in or moving into MHPI units may experience larger or higher quality units, with more amenities than the MHPI project would otherwise have under the lower BAH rates. Dual-military couples primarily live off-post for economic reasons, with the exception of select senior-ranking command positions where service members are generally expected to live on base, in “commander’s residences.” Both service members receive BAH at the without-dependants rate, unless they have one or more non-military dependants, in which case, the senior-ranking person of the couple receives BAH at the with-dependants rate. Since their combined BAH is substantially more than the cost of renting or owning in the civilian market, dual-military couples rarely live in MFH.

5. **Trading BAH for MILCON**

Due to budget limitations Congress would not appropriate $450 million in a given year for new housing in Monterey. The Army RCI PM commented that $450 million exceeds the Army’s entire family housing appropriation for FY04 and that little or no savings will result from shifting the funding from MILCON appropriation to BAH (Spigelmeyer, 2003). It is certainly willing to pay $81.24 million per year indefinitely.
6. **Land Contribution for Free**

When developing housing privatization projects, government contribution was justified on the bases that a gap exist between the private developer’s equity and additional available private sector financing. It was assumed at launch of the privatization initiative that if the entire amount of BAH had been used for construction, property management, and servicing the debt, then the privet-sector firms would have had little incentive to participate in privatization projects. This dynamic created a development gap, which must be filled by government contributions, most frequently by conveyance of land and existing housing units. Increased BAH rates make unnecessary the conveyance of land end existing housing units to developer for free. After eliminating out of pocket expenses, BAH is designed to be fair for all service members in all locations in the United States. The typical service member in a given grade and dependent status at a duty station on average will have zero out of pocket expense by 2005. In other words the average BAH would be equal to the average market price for rental housing at a given location. The increased BAH to meet the market price alone eliminated the financial gap between the private developer’s equity and additional available private sector financing, making unnecessary and unjustified any further government contribution.
VI. HICKAM AFB, AIR FORCE

A. OVERVIEW

Hickam AFB is located at the mouth of Pearl Harbor on the island of Oahu, Hawaii. The market area includes southern and central portions of Oahu. The base is assigned to Pacific Air Force Command and is home to the 15th Air Base and the Headquarters for the Pacific Air Forces. Housing at Hickam AFB is located in three residential areas (Capehart, Earhart, and Original areas). Only housing within Capehart and Earhart will be privatized. The 36 Original Housing will not be conveyed but will be renovated by the Developer.

![Figure 6 – 1: Location of Hickam](image)

B. SCOPE OF THE MHPI

Original plan using the traditional MILCON methods to address the housing needs of service members assigned to Hickam AFB called for constructing, revitalizing houses at a rate of 2 projects, 100 housing units each, a year. Housing inventory is numbered at approximately 2,640 units. Using traditional MILCON it would have taken 2,640 units/ 2*100 units = 14 years to complete the project at a cost of $390 million.
MILCON funding shortages made it necessary to decrease the planned rate of construction and revitalization to one project of 50 units a year, which would have taken 53 years to complete. Finally Air Force applied to MHPI tools to address its housing needs at Hickam AFB. The Air Force is taking its tentative approach, insisting that privatized housing be severable from the main installation, while still relying on MILCON for approximately half of its housing needs.

Hickam AFB project involves a real estate transaction to privatize approximately half of the military family housing. (total housing 2,640 units) The Air Force intends to lease approximately 238 acres of land for 50 years and convey 1,356 existing housing units and other improvements to Actus Lend Lease, a private community development company. Once an agreement is signed, Actus Lend Lease will own and operate the rental housing development for military families for 50 years, as well as finance, plan, design, and construct improvements. After 50 years all improvements reverse back to the Air Force, if the original partnership is not extended. This agreement would exist for a fifty-year period with a twenty-five year renewal clause. Actus Lend Lease, within approximately five years, will construct 638 new units in the Earhart housing area, conduct major renovation on 178 Capehart units, and conduct minor renovation on 354 Capehart units and 186 Earhart units.

At Hickam real estate transactions for government-owned land, facilities, and improvements include a 50-year ground lease and a conveyance of existing housing units and infrastructure. In addition, an Operating Agreement will govern operations on the site. The real estate agreements will allow the private developer to acquire appropriate financing and collect revenues from the housing to help finance the project. Community support facilities within the housing area like basketball courts and playgrounds will be conveyed to the private developer. Portions of the wastewater, electric, and water systems are conveyed. Infrastructure, such as roads, parking areas, sidewalks, street lighting, irrigation systems, and drainage systems located within the leased parcels of land will also be conveyed to the private developer. Telephone and CATV are available on-site from local commercial providers. The Government has available funding for a direct loan and a limited loan guarantee for this project if required. The housing allowances,
provided to military personnel, who then use those allowances to pay for housing rent and utilities, do not count against the available funds for the project. The success of the project is based on a long-term commitment between the Air Force and Actus Lend Lease.

Actus Lend Lease plans to conduct four major phases of construction. Minor renovation work will be scheduled in a manner to minimize inconvenience to residents:


*Demolish 194 units in Capehart, build/replace 178 units in Capehart, build 16 new units in Earhart, and build housing office & community center.*


*Demolish 222 Earhart units and build 266 new units.*


*Demolish 214 Earhart units and build 196 new units.*

**Phase Four** – Commencing 9/07 and completed 9/2008.

*Demolish 186 Earhart units, build 160 new units, and build swimming pool and recreational sports complex.*

![Figure 6 - 2: Housing Units to be Privatized (Arrowed) and Actus Lend Lease Improvements to be Made.](image)
C. DESIGN AND CONSTRUCTION REQUIREMENTS

Details on what Actus Lend Lease will provide are forthcoming. However, below is a minimum of what the company intends to provide:

1. **Community Plan** will meet the City and Country of Honolulu codes, standards, regulations, and industry practices. Incorporate green space, landscaping, underground utilities, and recreation areas to enhance the overall neighborhood environment and improve quality of life. Reconfigure existing vehicular and pedestrian traffic patterns as needed for new construction. Coordinate utility construction and services with local providers. Provide meters as required to allow proper billing of responsible parties. Cut curbs to provide handicapped accessibility. Provide tot lots and playgrounds.

2. **New Construction**

New construction will be modern efficient floor plans incorporating orderly arrangement of functions, circulation and open spaces, designs with inviting entrance, indoor/outdoor integration and pleasing interior appearance. Insides houses will have conveniently interior storage. Kitchens & bathrooms will be modern with well organized work area and quality fixtures and finishes, hard finish floor in kitchen, dining area, and entry foyer, two full baths and one ½ bath in 3 and 4-bedroom units. House units will be a combination of multiplex, duplex, and handicap accessible units. Materials of the houses will be durable, low maintenance, and functional materials, equipment, and finishes. All houses have central air conditioning with carpet in bedrooms, halls, and other living areas, along with overhead lighting in all rooms, also new energy efficient appliances included. Furthermore, all houses need to have solar water heating, screen doors, exterior trash storage areas screened.

3. **Perform Major Renovations on 178 Units in Capehart.**

In addition to the major renovation requirements described in the previous paragraph, Actus Lend Lease must ensure these homes are architecturally compatible with the existing homes in the area.
4. **Perform Minor Renovations on 540 Units in Capehart and Earhart**

All 540 Houses in Capehart and Earhart will be added with solar water heating while 84 Earhart units, 82 Earhart units, and 20 Earhart units will be added with central A/C and lanai, roof over lanai and CATV outlets, respectively.

**D. REAL ESTATE MANAGEMENT SERVICES**

Actus Land Lease will provide a quality property management service, including professionally staffed property management office, certified real estate property manager, tenant leases/eviction/dispute resolution procedures. The developer will allow tenants to provide in-home childcare and operate other in-home businesses, provided they obtain applicable permits, allow domesticated pets on premises with no pet deposit. The developer will also provide pest control, curbside refuse collection and recycling service, all utilities and refuse collection for common areas.

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</tr>
</tbody>
</table>

**Table 6-1: Housing Inventory after Renovation and Replacement Construction**

**E. AUTHORITIES USED IN MONTEREY**

Air Force’s project at Hickam AFB uses the following three authorities:

- The Air Force made their land and existing housing available to Actus Lend Lease, LLC for the new housing
- The Hickam developments will also include ancillary facilities infrastructure, community centers, community swimming pools, etc.
- Rent will be paid through allotment of BAH.

All three authorities are associated with 0% budget scoring: In effect, using the “free” MHPI authorities, Hickam’s MHPI leveraged the Air Force’s land, housing, and future BAH to purchase 45% of Hickam Community Housing (HCH) limited liability
corporation (LLC), while Actus Lend Lease LLC owns 55% of the corporation. Although land is expensive in and around Hickam, Hawaii contributing the land and housing at Hickam AFB will have no impact on the defense budget. Because of budget scoring, DoD’s real property has no budgetary value. Hickam Community Housing LLC would own, operate and maintain Hickam's privatized homes.

**BUSINESS ENTITY AT HICKAM**

<table>
<thead>
<tr>
<th>Air Force</th>
<th>Actus Land Lease LLC</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Contributes Land &amp; Facilities as Equity</td>
<td>o Establishes the Business Entity – HCH LLC</td>
</tr>
<tr>
<td></td>
<td>o Secures 1st Mortgage Debt</td>
</tr>
<tr>
<td></td>
<td>o Contributes Equity</td>
</tr>
</tbody>
</table>

**HICKAM COMMUNITY HOUSING, LLC**

<table>
<thead>
<tr>
<th>Air Force (Member)</th>
<th>Actus Land Lease (Managing Member)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURPOSES</td>
<td>Finance, design, construct, acquire</td>
</tr>
<tr>
<td></td>
<td>Own, lease, convey, operate, manage, maintain, and/or renovate housing</td>
</tr>
</tbody>
</table>

**OPERATING AGREEMENT**

- Design/Build Contract
- Property Management Agreement
- Land and Facilities lease
- Asset Management Agreement
- Consulting Architect Contract

**Figure 6-3: Business Entity at Hickam**

**F. IMPLICATIONS OF BAH**

In Hawaii although land is limited and building on land is restricted the availability of private housing provides a real freedom of choice both legally and physically to the service members. Essentially the Air Force offered service members the
choice of Government housing with BAH forfeited or full BAH which service members could apply to housing in the commercial rental market. If a significant proportion of potential renters choose to rent private-sector housing, due to recent increase of BAH, the developer’s financial projections may require rethinking.

G. ACCESSIBILITY OF HOUSING

The Hickam project meets Air Force guidance that requires that housing to be privatized be capable of being physically separate from other installation functions. The areas that best fit the criteria happened to be those residential areas that are comprised of only enlisted homes. This opens the housing market to civilian tenants who might compensate for the loss of revenue due to low occupancy rate of military tenants. Only when vacancies have exceeded 5 per cent for more than three consecutive months can the developer rent to other eligible tenants at market rent rates. The developer could only rent enough units to bring the vacancy rate below 5 per cent. The vacancy rate at Hickam has historically been less than 2 per cent. Eligible tenants are referred on a priority list:

- Other active duty military members
- Federal service employees
- Retired military members
- Guard and Reserve military members
- Retired federal civil service
- DoD developer employees
- General public

H. RENT STRUCTURE

Military members will receive their basic allowance for housing (BAH) and will be offered units designated for their rank at a cost equal to BAH (with dependents). Then, military tenants pay rent, which includes refuse collection, water, and sewage, by allotment to the developer. Furthermore, tenants pay phone & cable TV charges to respective providers. For electricity, it will initially be included in the rent. After meters are installed on new or renovated units, the rent will be reduced by 110% of the projected electric cost and the tenant will pay for actual electricity used.
Initially, electricity, water and sewage costs will be included in the rent. Later on residents will pay electricity separately based on individual usage, once utility meters are installed at each home and a study is completed to determine the estimated average electricity cost per unit. At that time, a portion of the service member’s monthly BAH will be set aside as a utility allowance which equates to 110 per cent of the average electricity cost for a typical type (junior or senior enlisted) of unit. When all units are metered, the rent = BAH – 110 % of the predetermined average cost of utilities for “same type” units. If the base electricity cost for unit type = $100 then utility allowance = 1.1 * $100 = $110. BAH for an E-6 serviceman is $1,628 in Hawaii region in 2004. Rent for E-6 = $1,628 - $110 = $1,518. (The Benefits of Housing Privatization)

The Air Force’s requirement is for Actus Lend Lease, at it’s own expense, to make available to tenants, personal property and liability insurance covering up to $40 000 with a $250 deductible. Tenants must apply for the insurance and be accepted by the insurer.

I. CASH FLOW FROM OPERATIONS

The average enlisted BAH (as of 2004) at Hickam AFB is $1530 per month, so the developer gains $1530 per month for every rented unit. Theoretically we can calculate with 1,356 units. Of course, that amount must be adjusted for uninhabitable units and for those under construction at any time. Depending on the dynamics of the program, it appears that on average 100 units will be under construction at any time. That gives us approximately 1256 revenue-producing units throughout the construction period. 1256 units * $1530/unit/month = $1.92 million/month or $23.08 million/year. Using traditional MILCON for the privatized housing units, that account for approximately half of the housing inventory, it would have taken 1,356 units/ 1*100 units = 14 years to complete the project at current funding level and would have cost $390/2 = $195 million or $195/14 = $14 million a year.
J. INCENTIVES FOR DEVELOPERS

The BAH is not the entire amount that is used for construction, property management, and servicing the debt, the developer has other revenues as well. Similar to the Monterey Project at Hickam AFB Air Force and the contractor negotiated exact fees, including the automatic and incentive proportions, during development of the Community Development Management Plan (CDMP). The developer received $350,000 for the development of the CDMP. Projected costs for the basis of the Development and Construction Management Fees are determined during development of the CDMP. They
are not actual costs. The structure of fees that the private sector developer can collect for participation in the privatization program is similar to that of the Army RCI’s:

- Property/Asset Management: 3% - 5% of gross rent for available units less vacant units
- Development Management: 3% - 5% of total projected development cost
- Construction Management: 3% to 6% of projected total “hard” cost of construction

K. RISK ASSESSMENT

1. Declining Occupancy Rate

The military housing occupancy rate at Hickam AFB has historically been more than 98 per cent. MHPI was initiated and launched at Hickam based on historical experience related to Military Family Housing and ignoring the fact that another initiative has been launched simultaneously. Here we can expect the repetition of the lesson that we have already learned in the Monterey Project. The military housing occupancy rate can decline significantly as the project moves forward. The private contractor, Land Lease Actus LLC, must achieve a 95% occupancy rate to maintain financial success of the project. The projected occupational rate can be significantly lower than the targeted number.

2. Falling Retention

Falling retention rate so far has had an effect on the Army rather than the Air Force. For the time being we reasonably can not assume that the Air Force could face similar problems as the Army does.

L. BENEFIT AND COST ASSESSMENT

1. Planning exclusively on historical experience

MHPI initiated and launched at Hickam AFB is based on historical experience related to Military Family Housing and ignores the fact that another initiative has been launched simultaneously. In his President’s Management Agenda for FY2002, President Bush reiterated his commitment to reducing average out-of-pocket expenses for housing
to zero by 2005. As a result of increased BAH and the requirement that all occupants of Privatized Military Housing assign their entire BAH to Actus Land Lease LLC as rent, larger percentage of military personnel could elect not to live in Privatized Military Housing. That in turn leads to higher vacancy rates, jeopardizing the profitability of the corporation.

2. **Opportunity Cost of Civilian Tenants**

   In expectation of vacancies civilians are expected to occupy some percentage of Actus Land Lease’s Military Housing due to the fact that all new housing is accessible to the public. The developer can rent the housing units to civilian tenants at market rent rates when vacancy is higher than 5 per cent for more than three consecutive months. The developer could only rent enough units to bring the vacancy rate below 5 per cent. The partnership agreement between the Air Force and Actus Land Lease LLC included this because experience has shown that the total funds available in developer equity and available private sector financing is normally less than the total development cost. This dynamic creates a development gap which must be filled by government contribution. The percentage of civilian occupation of vacant housing determines the opportunity cost of not using DoD funds and financial resources to finance military or military related activities. At Hickam the Air Force offered the land and buildings in the Earhart and Capehart housing area as equity for its 45 percent share in a public-private cooperation, called Hickam Community Housing LLC. It is unclear how the conveyance of land and existing housing has been valued and monetized in the partnership agreement. If we assume that the value of the conveyed property is approximately $100 million and further assume that 5 percent of the housing units would be offered to civilian occupants, than $5 million is the opportunity cost of the transaction. This is the amount that could have been spent on military or military related activities other than on satisfying civilian housing needs, had the military sold the appropriate number of housing units and acre of land to the market.
3. Cost Plus Percentage of Cost

There are dangers and unintended consequences of basing a contractor’s fee on the actual or projected costs of a project. The RCI Program Financial/Fee Information, describes the Development Management Fee as “. . .between 3% and 5% of the total development costs. The amount included in total development costs will be agreed upon during the development of the CDMP. . .” Similarly, the Construction Management fee is “. . .3% to 6% of the total hard cost of construction. A material portion of this fee should be performance based. The amount included in total hard cost will be agreed upon during the development of the CDMP for the project. Cost plus percentage of cost contracts encourage a contractor to run up costs in order to increase his fee. RCI’s fees are not based on actual costs; they are based on projected costs. So, instead of encouraging a contractor to incur actual costs, RCI encourages a contractor to inflate his cost estimates during the preparation of the CDMP. The incentives in the fees also encourage the contractor to inflate his estimates. When the contractor incurs less than his estimates, he earns incentives for cost under runs. Without competition, there are no other contractors’ estimates with which the winning contractor’s estimates can be compared.

4. Income Implications of BAH

Increasing BAH rates is an effective method to increase overall compensation to most service members. Since BAH is not taxed at any level, every dollar of BAH increases represents one additional dollar of benefit available to the service member. BAH increases directly benefit all military families who live off base whether they actually spend the additional BAH on housing–related expenses or other family priorities. Service members living in MFH may not benefit from BAH increases. Those living in traditional MILCON housing will not benefit from higher BAH rates because their MFH is not funded through BAH. Those living in or moving into MHPI units may experience larger or higher quality units, with more amenities than the MHPI project would otherwise have under the lower BAH rates. BAH for an E-6 serviceman is $1,628 in Hawaii region in 2004. If the base electricity cost for unit type = $100 then utility allowance = 1.1 * $100 = $110, than rent for E-6 = $1,628 - $110 = $1,518. Table 6-1 shows a comparison between privatized housing and market rent rates. An E-6 service
member, choosing to live in a two or three bedroom housing unit, can benefit most from BAH increases, when lives off base. When the service member elects to live off base in a two, three, or four bedroom apartment, condos, or townhouse, or if he chooses to live in a two bedroom single-family home pays rent significantly less than he should pay living in privatized military housing. The net benefit, that he can spend on other family priorities ranges from $218/month to $768/month. If the serviceman elects to live off base and prefers larger and higher quality three or four bedroom single-family rental home with more amenities, then he might have to pay the difference between his BAH and the market rent out of pocket. This corresponds with previous historical experiences that show the most cost-efficient way to solve service member’s housing needs is to rely on local private housing. The average BAH in Hawaii is approximately $1,530/month, which suggest that a significant portion of the servicemen would choose to live off post and benefit from each additional dollar of the increased BAH that they should have spent on rent living on post.

<table>
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<td>$1,518</td>
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<td>Average monthly rent in the local community</td>
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<td>(apartment, condos, townhouse)</td>
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<td>$900 - $1,250</td>
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<td>Difference</td>
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<td>Average monthly rent in the local community</td>
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<tr>
<td>(single-family rental homes)</td>
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<td>$18 - (-$1,482)</td>
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Table 6-2: A Comparison between Privatized Housing and Market Rent Rates
The houses are designated as either junior or senior enlisted homes. Members who choose to live off base receive their entitled amount regardless of the cost of their rent or mortgage. Likewise, members who choose to live on base in privatized housing receive and forfeit the same amount of BAH, regardless of the condition or type of unit they live in. Because there are only two categories of enlisted homes, servicemen with different ranks can fill up the same type of units. Having servicemen in either senior or junior enlisted housing units with different ranks generate different revenues (BAH) for the developer. It is likely that the developer would tailor the cost of construction and operations and management of housing units to meet it’s profit expectations based on the lower “income” customer and making an extra profit on the higher “income” customer.

5. Trading BAH for MILCON

Due to budget limitations Congress would not appropriate $390 million in a given year for new housing at Hickam, but it is certainly willing to pay $23.08 million per year indefinitely. The Air Force commented that $390 million exceeds the Air Force’s entire family housing appropriation for FY04. This underlines the recurrent justification for Military Housing Privatization Initiative, which is that the Government can not provide the necessary funding up front and the use of private sector capital can reduce the government’s initial outlays for housing revitalization by spreading costs over a long term.

6. Land Contribution for Free

When developing housing privatization projects, government contribution was justified on the bases that a gap exist between the private developer’s equity and additional available private sector financing. It was assumed at the launch of the privatization initiative that if the entire amount of BAH had been used for construction, property management, and servicing the debt, then the privat-sector firms would have had little incentive to participate in privatization projects. This dynamic created a development gap, which must be filled by government contributions, most frequently by conveyance of land and existing housing units. Increased BAH rates make unnecessary the conveyance of land end existing housing units to developer for free. After eliminating out of pocket expenses, BAH is designed to be fair for all service members in all
locations in the United States. The typical service member in a given grade and
dependent status at a duty station on average will have zero out of pocket expense by
2005. In other words the average BAH would be equal to the average market price for
rental housing at a given location. The increased BAH to meet the market price alone
eliminated the financial gap between the private developer’s equity and additional
available private sector financing, making unnecessary and unjustified any further
government contribution. Increasing BAH rates makes unnecessary the conveyance of
land and existing housing units to developer for free.

7. Special benefit for Military Couples

A special benefit exists for military members married to military members. It may make economic sense to live downtown for two married military members because each receives BAH based on their ranks. If they find an affordable housing unit, there is a definite opportunity to make a little extra money. Under privatization, that same opportunity exists if they live on base. Each member will receive BAH in the single rate, but the rent will be based only on the senior member’s BAH with dependent rate.

8. MILCON costs less than MHPI

Using traditional MILCON for the privatized housing units, that accounts for
approximately half of the housing inventory, it would have taken 14 years to complete
the project at current funding level and would have cost $14 million a year, which is
definitely less than what the Air Force is planning to pay out in form of BAH for it’s
servicemen, who could live in traditional MILCON housing units otherwise. The
projected BAH that the developer would collect as a rent stands at $23.08 million per
year.
VII. CONCLUSION

It is unclear precisely what impact the privatization program will have on infrastructure outlays in either the short- or long term. Some upfront investments still will be required. For example, traditional military construction funding still will be needed as the seed money for privatization projects and for projects not suitable for privatization. Also, until many more units are renovated or built on bases under the program, DOD will need substantial outlays to operate and maintain existing units. Finally, as additional units become privatized, the O&M savings that DOD realizes largely will be offset by increased budgeting for the military personnel account to cover the payment of housing allowances to more families.

Many privatization projects under consideration propose long-term, 50 year agreements between DOD and the developer. Such agreements present several risks, including increased potential that the housing may not be needed in the future, the contractor might not operate and maintain the housing as expected, and civilians might occupy on-base housing if it is not fully used by military members.

A further concern is that DOD may not have optimally integrated the Military Housing Privatization Initiative with the other tools available for addressing housing problems. DOD several expressed the greater need of use of available housing in local communities and launched it’s BAH initiative. Maximizing referrals to such housing is important since the government’s annual costs are about $5000 per unit lower on average when acceptable and affordable housing can be found in the community than when on-base housing (either under MILCON or MHPI) is provided. Although sufficient quantities of affordable civilian housing are not available at many installations, greater adherence to this policy is needed if DOD is to avoid building or revitalizing more housing than is needed under both military construction and privatization programs. Coordination on housing initiatives (increased BAH, MHPI) appear to be important, since housing allowances could rise in some areas, thereby making more local housing affordable to service members and lessening the need for renovation and construction. Capitalizing on the strength of each housing tool through a more integrated approach is
critical for DOD to ensure that the military’s housing needs are met as efficiently as possible.

Using a combination of MILCON and MHPI projects, DOD plans to eliminate inadequate MFH by 2010. While the success or failure of this plan remains to be realized, and is highly dependant on both MILCON and BAH funding streams, the likelihood of success seems greater than at any time since Capehart. The first thirteen MHPI projects achieved an average leverage of over six to one, providing six times as much construction or renovation capital as would have been available under MILCON. This leverage is an example of MHPI’s ability to dramatically increase the rate of MFH replacement and renovation. Although constructions in some cases are only marginally less costly or in some cases even more costly than MILCON the need to fix the inadequate housing inventory within a reasonable period of time is of equal importance as well. Underlying reality is that funding through MILCON has not been available and the paramount benefit of privatization is the role that early delivery of adequate housing provides in improving the quality of life of service members. And, even if only marginally less costly, MHPI is available, whereas the necessary MILCON appropriations are simply not available in sufficient amounts to fix the MFH inadequacy problem by 2010 target date.
# APPENDIX A

**ALTERNATIVE AUTHORIZATIONS RANKED BY IMPACT ON BUDGET**

<table>
<thead>
<tr>
<th>Authority</th>
<th>Description</th>
<th>Benefit</th>
<th>Budget Scoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Conveyance or Lease of Land or Units</td>
<td>Transfer of ownership</td>
<td>Secure private financing, immediate cash flow</td>
</tr>
<tr>
<td>2.</td>
<td>Unit Size &amp; Type</td>
<td>Build to local codes</td>
<td>Locally compatible, cost-effective construction</td>
</tr>
<tr>
<td>3.</td>
<td>Ancillary Support Facilities</td>
<td>Permit supporting amenities</td>
<td>Enhance project attractiveness</td>
</tr>
<tr>
<td>4.</td>
<td>Payment by Allotment</td>
<td>Guaranteed cash stream</td>
<td>Minimize rent payment uncertainty</td>
</tr>
<tr>
<td>5.</td>
<td>Loan Guarantees</td>
<td>Guarantee of private sector loan</td>
<td>Lower interest rate, ensure financing</td>
</tr>
<tr>
<td>6.</td>
<td>Direct Loan</td>
<td>Direct loan to contractor</td>
<td>Below-market financing</td>
</tr>
<tr>
<td>7.</td>
<td>Differential Lease Payments (DLP)</td>
<td>Pay difference between BAH and market rents</td>
<td>Leverages private financing</td>
</tr>
<tr>
<td>8.</td>
<td>Investment (Joint Venture)</td>
<td>Equity investment</td>
<td>Partnership interest</td>
</tr>
<tr>
<td>9.</td>
<td>Interim Leases</td>
<td>Government lease of other units until project conveyed</td>
<td>Enables immediate occupancy</td>
</tr>
<tr>
<td>10.</td>
<td>Assignment of Members (Tenant Guarantee)</td>
<td>Members assigned housing in project</td>
<td>Forces above market occupancy rate</td>
</tr>
<tr>
<td>11.</td>
<td>Build to Lease</td>
<td>Contract construction, lease units</td>
<td>Central payment by DOD (801-like)</td>
</tr>
<tr>
<td>12.</td>
<td>Rental Guarantee</td>
<td>Guarantee of occupancy or rental income</td>
<td>Enhances financing (802-like)</td>
</tr>
</tbody>
</table>
APPENDIX B
AUTHORITIES IN THE MILITARY HOUSING PRIVATIZATION INITIATIVE

1. Direct loans: The Department of Defense (DOD) may make direct loans to persons in the private sector to provide funds for the acquisition or construction of housing units suitable for use as military family or unaccompanied housing. (10 U.S.C. 2873(a),(1))

2. Loan guarantees: DOD may guarantee a loan to any person in the private sector if the proceeds of the loan are used to acquire or construct housing units suitable for use as military family or unaccompanied housing. (10 U.S.C. 2873(b))

3. Build and lease: DOD may enter into contracts for the lease of military family or unaccompanied housing units to be constructed under the initiative. (10 U.S.C. 2874)

4. Investments in nongovernmental entities: DOD may make investments in nongovernmental entities carrying out projects for the acquisition or construction of housing units suitable for use as military family or unaccompanied housing. An investment under this section may include a limited partnership interest, a purchase of stock or other equity instruments, a purchase of bonds or other debt instruments, or any combination of such forms of investment. (10 U.S.C. 2875(a),(b))

5. Rental guarantees: DOD may enter into agreements with private persons that acquire or construct military family or unaccompanied housing units under the initiative to guarantee specified occupancy levels or to guarantee specific rental income levels. (10 U.S.C. 2876)

6. Differential lease payments: Pursuant to an agreement to lease military family or unaccompanied housing to service members, DOD may pay the lessor an amount in addition to the rental payments made by military occupants to encourage the lessor to make the housing available to military members. (10 U.S.C. 2877)

7. Conveyance or lease of existing property and facilities: DOD may convey or lease property or facilities, including ancillary supporting facilities, to private persons for purposes of using the proceeds to carry out activities under the initiative. (10 U.S.C. 2878)
8. Interim leases: Pending completion of a project under the initiative, DOD may provide for the interim lease of completed units. The term of the lease may not extend beyond the project’s completion date. (10 U.S.C. 2879)

9. Conformity with similar local housing units: DOD will ensure that the room patterns and floor areas of military family and unaccompanied housing units acquired or constructed under the initiative are generally comparable to the room patterns and floor areas of similar housing units in the locality concerned. Space limitations by paygrade on military family housing units provided in other legislation will not apply to housing acquired under the initiative. (10 U.S.C. 2880(a),(b))

10. Ancillary supporting facilities: Any project for the acquisition or construction of military family or unaccompanied housing units under the initiative may include the acquisition or construction of ancillary supporting facilities for the housing. (10 U.S.C. 2881))

11. Assignment of members of the armed forces to housing units: DOD may assign service members to housing units acquired or constructed under the initiative. (10 U.S.C. 2882)

12. Lease payments through pay allotments: DOD may require service members who lease housing acquired or constructed under the initiative to make lease payments by allotment from their pay. (10 U.S.C. 2882©)
APPENDIX C
AIR FORCE PROJECTS AWARDED AS OF 31 MAY 2004

Lackland Air Force Base, Texas
Awarded August 1998 to Landmark Organization. This project involved $42.6 million to construct 420 new units at Lackland Air Force Base in San Antonio, Texas. This project is complete.

Robins Air Force Base, Georgia
Awarded September 2000 to Hunt Building Corporation. This project involved $56.5 million to construct 370 new units and renovate 300 units at Robins Air Force Base in Warner-Robins, Georgia. This project is completed.

Dyess Air Force Base, Georgia
Awarded September 2000 to Hunt Building Corporation. This project involved $35.3 million to construct 402 new units off base for Dyess Air Force Base in Abilene, Texas. This project is completed.

Elmendorf Air Force Base, Alaska
Awarded March 2001 to Aurora Military Housing and Hunt Building Corporation. This project involved $91.7 million to construct 420 units, renovate 200 units, and demolish 176 units. This project is scheduled for completion in September 2003.

Wright-Patterson Air Force Base, Ohio
Awarded August 2002 to Properties of Wright Field (Miller-Valentine, Woolpert, Hunt Building Corporation). This is the largest housing privatization project in Air Force History, involving 1,536 houses. The deal included $99.1 million to privatize these houses at Wright-Patterson Air Force Base in Dayton/Springfield, Ohio.

Kirtland Air Force Base, New Mexico
Awarded April 2003 to Hunt Building Company. This project involved $150.6 million to privatize 1,078 units at Kirtland Air Force Base in Albuquerque, New Mexico.
APPENDIX D
ARMY PROJECTS AWARDED AS OF 31 MAY 2004

Fort Carson, Colorado.
Awarded September 1999 to J.A. Jones. Fort Carson is the DoD's first housing privatization project for an entire installation. J.A. Jones Community Development Company assumed responsibility for a $228.6 million dollar project to renovate 1,823 existing units and construct 840 new units on the installation in Colorado Springs, Colorado. Transfer of operations took place in November 1999.

Fort Hood, Texas
Awarded October 2001 to Lend Lease Actus. Lend Lease Actus assumed operations at Fort Hood in Killeen, Texas on April 2002. This is the largest housing construction and renovation project in the history of the military services. The initial project involves $260 million towards the construction of 973 new housing units and renovation of 4,939 homes at Fort Hood.

Fort Lewis, Washington
Awarded December 2001 to EQR Lincoln Properties. The developer will revitalize or replace 3,218 units, construct 345 new units, and improve neighborhood amenities at Fort Lewis near Tacoma, Washington. Transfer of operations occurred April 2002.

Fort Meade, Maryland
Awarded December 2001 to Picerne Military Housing. Picerne Military Housing will construct 2,748 units, renovate or repair 422 units, and improve neighborhood amenities at Fort Meade near the Washington-Baltimore corridor. The developer assumed operations in May 2002.

Fort Bragg, North Carolina
Awarded May 2002 to Picerne Military Housing. The project will result in the construction of approximately 3,050 new or replacement housing units, renovation of 1,815 housing units and the construction of 11 new community centers, as well as a host of other ancillary facilities and amenities to meet the family housing needs at Fort Bragg.
Presidio of Monterey/Naval Postgraduate School, California
Awarded October 2003 to Clark/Pinnacle Family Communities, LLC. The project will result in the construction of approximately 2,209 new or replacement housing units, and renovations.

Fort Stewart, Georgia
Awarded November 2003 to GMH Military Housing. The developer will revitalize or replace 3702 units at the military base.

Fort Campbell, Kentucky
Awarded December 2003 to Lend Lease Actus, LLC. The developer will revitalize or replace 4255 units at the military base.

Fort Belvoir, Virginia
Awarded December 2003 to Clark Pinnacle Family Communities, LLC. The developer will revitalize or replace 2070 units at the military base.

Fort Irwin/Moffett Field/Parks Training Area, California
Awarded March 2004 to Clark Pinnacle – California Military Communities, LLC. The developer will revitalize or replace 2806 units at the military base.
APPENDIX E

NAVY AND MARINE CORPS PROJECTS AWARDED AS OF 31 MAY 2004

Kingsville Naval Air Station, Texas
Awarded July 1996 to Landmark/Capstone. The 15-year project required the construction of 404 new units off base for the Kingsville Naval Air Station near Corpus Christi, Texas. This project is completed. Awarded November 2000 to Hunt Building Corporation. The project required the construction of 150 units.

Everett Naval Station, Washington
Awarded March 1997 to Arlington/Dujardin. This is a 10-year deal worth $20 million to construct and privatize 185 new units off base at Everett Naval Station in Everett, Washington. This project is completed. Awarded December 2000 to Gateway/Pinnacle Family Communities, LLC. This is a 30-year deal to construct 288 new units on private land.

Camp Pendleton Marine Corps Base, California
Awarded November 2000 to Hunt Building Corporation. This 50-year project included $83 million to privatize 712 new units at Camp Pendleton Marine Corp Base in Oceanside, California. Phase II: Awarded September 2003 to Hunt/Fluor Lincoln Clark Family Communities, LLC. This project constructs and revitalizes 4534 housing units.

San Diego Naval Complex, California
Phase I: Awarded August 2001 to Lincoln Property Company and Clark Realty Capital. This 50-year project involved $261.8 million for 3,248 units at the San Diego Naval Complex near San Diego, California. Phase II: Awarded May 2003 to the same contractors. This project involved $421.5 million for 3,302 units at same location.

New Orleans Naval Complex, Louisiana
Awarded October 2001 to Louisiana Navy Family Housing and Patrician Asset Management Company. This 50-year deal involved $79.8 million for 935 units at the New Orleans Naval Complex near New Orleans, Louisiana.
South Texas Naval Complex, Texas
Awarded February 2002 to South Texas Military Housing and Landmark Organization. This 50-year deal involved 661 units at South Texas Naval Complex in two locations: Corpus Christi Naval Air Station and Ingleside Naval Station.

Beaufort Marine Corps Air Station, South Carolina
Awarded March 2003 to Lend Lease Actus. This 50-year project involved 1,718 units at Beaufort Marine Corps Air Station, Marine Corps Recruit Depot, and Naval Hospital in Beaufort, South Carolina. Lend Lease Actus will renovate 1,227 existing units, replace 331 units, and construct 160 new units.

Hawaii Regional, Hawaii
Phase I: awarded April 2004 to Ohana Military Communities, LLC. This 50-year project involves 1,948 units at the Naval Base.
1. INTRODUCTION
The Army has developed life cycle cost analyses for 28 privatization candidate sites (see Table J-1). These analyses are based on the potential project scopes shown in Table 2-1 and notional development plans. During concept development, each site will be fully analyzed in detail in accordance with procedures approved by the Office of the Secretary of Defense (OSD).

2. APPROACH
This analysis compares the present value of the total life cycle cost for two alternatives and seeks to identify the more economical of the two, from the Government perspective. The Military Construction (MILCON) Alternative is shown in the table as “AFHC”, or “Army Family Housing Construction”. The Privatization Alternative is shown in the table as “RCI”, for Residential Communities Initiatives. Because life cycle cost analyses are decision-making tools for the Government, all costs reflected in these analyses are Government costs and shown in constant, FY 2002 dollars. Some considerations for these analyses are:

- Army Family Housing Operations (AFHO) costs for the MILCON/AFHC Alternative in this comparison were prepared according to OSD policy released on February 6, 2002.
- Government expenditures for the entirety of a development scope (AFHC) are identical to that assumed for the Privatization Alternative. These expenditures were based on the differential between the new unit cost expected under each Alternative.
- Single largest cost to the Government under the Privatization Alternative is the Basic Allowance for Housing (BAH) paid to military residents over the life of the project.
- Other Government costs under the Privatization alternative include the Community Development and Management Plan (CDMP) purchase price, the cost of oversight/asset management, fire and police protection attributable to family housing, and any equity investment taken by the Government in the privatization entity.
• Although both alternatives incur school impact aid, this is a "wash cost" and does not affect the relative ranking of the two alternatives.

3. SUMMARY

This analysis shows that the Privatization alternative is less costly over the life cycle than the MILCON/AFHC Alternative for all FY 2002 to FY 2005 privatization candidates.

Table J-1 Life Cycle Costs (SM)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Installation</th>
<th>Concept Approval Received</th>
<th>Estimated Costs (under AFHC)</th>
<th>Estimated Costs (under RCI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY00</td>
<td>Fort Carson</td>
<td>Yes</td>
<td>$895.00</td>
<td>$929.00</td>
</tr>
<tr>
<td>FY01</td>
<td>Fort Hood</td>
<td>Yes</td>
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<td>$1,122.00</td>
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<tr>
<td>FY01</td>
<td>Fort Lewis</td>
<td>Yes</td>
<td>$1,637.00</td>
<td>$1,322.00</td>
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<tr>
<td>FY01</td>
<td>Fort Meade</td>
<td>Yes</td>
<td>$1,743.00</td>
<td>$1,049.00</td>
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<tr>
<td>FY02</td>
<td>Fort Bragg</td>
<td>Yes</td>
<td>$1,520.56</td>
<td>$1,243.49</td>
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<tr>
<td>FY02</td>
<td>Presidio or Monterey</td>
<td>Yes</td>
<td>$1,165.45</td>
<td>$1,050.50</td>
</tr>
<tr>
<td>FY02</td>
<td>Fort Hamilton</td>
<td>Yes</td>
<td>$149.02</td>
<td>$137.50</td>
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<tr>
<td>FY02</td>
<td>Fort Detrick</td>
<td>Yes</td>
<td>$181.50</td>
<td>$119.05</td>
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<tr>
<td>FY02</td>
<td>Fort Campbell</td>
<td>Yes</td>
<td>$1,434.79</td>
<td>$951.36</td>
</tr>
<tr>
<td>FY02</td>
<td>Fort Irwin/Moffat/Parks</td>
<td>Yes</td>
<td>$1,511.35</td>
<td>$1,112.60</td>
</tr>
<tr>
<td>FY02</td>
<td>Picatiny Arsenal</td>
<td>Yes</td>
<td>$63.77</td>
<td>$42.96</td>
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<tr>
<td>FY02</td>
<td>Walter Reed AMC</td>
<td>Yes</td>
<td>$186.11</td>
<td>$125.40</td>
</tr>
<tr>
<td>FY02</td>
<td>Fort Stewart/Hunter AAF</td>
<td>Yes</td>
<td>$1,068.09</td>
<td>$824.13</td>
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<tr>
<td>FY03</td>
<td>Fort Polk</td>
<td>Yes</td>
<td>$1,085.74</td>
<td>$762.01</td>
</tr>
<tr>
<td>FY03</td>
<td>Fort Belvoir</td>
<td>Yes</td>
<td>$1,671.83</td>
<td>$1,305.92</td>
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<tr>
<td>FY03</td>
<td>Fort Shafter/Shofield Barracks</td>
<td>Yes</td>
<td>$3,826.99</td>
<td>$2,751.70</td>
</tr>
<tr>
<td>FY03</td>
<td>Forts Eustis/Story/Monroe</td>
<td>Yes</td>
<td>$531.71</td>
<td>$362.31</td>
</tr>
<tr>
<td>FY03</td>
<td>Fort Leonard Wood</td>
<td></td>
<td>$829.45</td>
<td>$587.91</td>
</tr>
<tr>
<td>FY04</td>
<td>Fort Sam Houston</td>
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<td>$357.25</td>
<td>$291.90</td>
</tr>
<tr>
<td>FY04</td>
<td>Fort Bliss</td>
<td></td>
<td>$900.98</td>
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<td>Fort Knox</td>
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<td>$1,081.87</td>
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<tr>
<td>FY04</td>
<td>Fort Benning</td>
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<td>$1,286.89</td>
<td>$1,107.53</td>
</tr>
<tr>
<td>FY04</td>
<td>Redstone Arsenal</td>
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<td>$240.88</td>
<td>$166.44</td>
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<tr>
<td>FY05</td>
<td>Fort Gordon</td>
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<td>FY05</td>
<td>Fort Rucker</td>
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<td>FY05</td>
<td>Fort Leavenworth</td>
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<td>$627.33</td>
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<td>FY05</td>
<td>Carlisle Barracks</td>
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<td>$140.17</td>
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<td>FY05</td>
<td>Fort Drum</td>
<td></td>
<td>$1,279.92</td>
<td>$608.32</td>
</tr>
</tbody>
</table>

Total $27,336.95 $20,627.49

APPENDIX G

GUIDELINES ON THE NEW HOUSING POLICIES AND COST FOR STUDENTS RECEIVING AN IMET LIVING ALLOWANCE

All accompanied IMET students receiving the US Living Allowance must live in government quarters if available within 45 days of arrival.

If your family is not here yet, but will be joining you, you must live in government housing if available within 45 days of your family’s arrival. If you are single/geographic bachelor, you are eligible for government housing on a space available basis. Please see the Housing Office for the rates for singles/geographic bachelors.

Effective 1 October, if you are living in what is now referred to government housing, your housing rents will increase based on your Basic Allowance for Housing (BAH), which is determined by your rank.

- ENS/2LT - $1311/month
- LTJG/1LT - $1543/month
- LT/CPT - $2203/month
- LCDR/MAJ - $2342/month
- CDR/LTC - $2432/month
- CAPT/COL - $2452/month
- RADM/BGEN – $2481/month

Because your rent is due at the beginning of the month, and you are reimbursed (based on your receipts), at the end of the month, we have received authorization to process a one-time advance against your living allowance in order for you to pay the first rent at the new rate on 1 Oct 03.

If you need an advance on your living allowance in order to insure the correct amount of funds are in your account for the 1 Oct 03 payment, please see Cindy on 22 or 23 Sep 03. If you do not do so by the 23rd, it could result in a delay of your advance being processed,
and the EFT of the rental amount may create the possibility of insufficient funds in your account. Please note – if at any time your account has insufficient funds to make the EFT transfer, you will be responsible for all penalty charges incurred (for both the bank and RCI Pinnacle). (penalty for Pinnacle – 1 day late $50; $5 for each day thereafter)

REGARDING ELECTRONIC FUND TRANSFERS (EFT) – you are NOT required to pay your rent via EFT. However, if you choose to pay your rent in person (as you currently are doing), you will be required to pay a security deposit of ½ of the cost of your monthly rental rate, plus your rent for the first month. Late penalty charges will be incurred as noted the previous paragraph.

RCI Pinnacle will be providing our office with a copy of your rental receipt, which means you will no longer be required to do so.
APPENDIX H

ONE MONTH’S FREE RENT

The Parks at Monterey Bay is currently offering one month's free rent to all active duty military members, who are in a residential lease off base. We would enjoy having the opportunity to house you and your family. If you are currently living out in town, we can help to get you out of your lease to come reside with us. We will also pay up to two month's penalties that may arise by ending your current lease.

Advantages to being a resident at the Parks:

- Quick move-in with no deposit required. And you will not have to come to our office each month to pay rent; we can set up an allotment to have the payment taken from your account.
- 24/7 Maintenance staff available to help residents. With a quick telephone call, we will arrange for someone to come to your house to fix any problem that arises.
- Location: La Mesa is located within bicycle or walking distance to NPS. Ord Military Community is close to Highway 1 and has the Commissary close by.
- Community Events: We invite all of our residents to join us for our upcoming special events: Holiday events, Concerts in the park, etc. Join your neighbors for some fun and have a friendly competition for our Yard of the Month!
- Rent includes all utilities (electricity, water, sewer, garbage).
APPENDIX I

UNACCOMPANIED RATE NOTE JANUARY 04

It has been brought to our attention that Pinnacle Housing will not be honoring the unaccompanied rate for unaccompanied IMET students receiving an IMET Living Allowance. **For those of you who are living in Pinnacle Housing and your families are not yet here, this is going to create a difference in what you will be required to pay for rent and what you are authorized to be reimbursed for.** Until your family arrives, we are only authorized to reimburse you at the unaccompanied rate.

In order to give you time to remedy the situation, i.e., either bring your family here earlier, or find housing downtown, we are going to waive the reimbursement of the unaccompanied rate through the end of March. This gives you 60+ days to bring your family in earlier, or find alternate housing if you so choose. Your lease at Pinnacle is month-to-month, so if you decide to move out, you may do so; you will just need to give them a 30 day notice in writing.

If you choose to remain in housing after 1 April 04 and your family has not yet joined you, you will be reimbursed at the unaccompanied rate even though you may be paying the accompanied rate to living in Pinnacle Housing.

Single Students/Geographic Bachelors are eligible to live in “single officer housing” at Pinnacle. There is a different price structure for single officer housing based on location of house, and number of bedrooms. Because of the maximum reimbursement of $75/day, there is the possibility that you may not be reimbursed for the entire amount of your rent depending on where you are living.

**Note:** **There is no longer a requirement for students receiving an IMET Living Allowance to live in Pinnacle Housing.** If you would prefer to live downtown, that is an option available to you. You will be reimbursed up to $75/day for rent. Again, if you choose to move out of Pinnacle Housing, you will be required to provide them with a 30
written notice of intent to vacate. If you move, you will need to provide our office with a copy of your new lease and your rent receipts as required each month.

**EFT:** Some of you are still having problems with the EFT withdrawal of your rent. It is very important that you make sure you have sufficient funds in your account. The EFT is set for the 3rd of each month and will happen that day regardless of whether you have enough money in your account or not. **Please remember, EFT is an option, it is not required.** You may choose to pay your rent in person each month (vice using EFT). If you choose to pay your rent in person, you will be required to pay a one-time security deposit of ½ month’s rent.

The rates for accompanied/unaccompanied are broken down below so you can see the difference.

<table>
<thead>
<tr>
<th></th>
<th>ACCOMPANIED</th>
<th>UNACCOMPANIED</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>$1,556</td>
<td>$1,156</td>
<td>$400</td>
</tr>
<tr>
<td>02</td>
<td>$1,793</td>
<td>$1,461</td>
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<tr>
<td>03</td>
<td>$2,291</td>
<td>$1,701</td>
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<tr>
<td>05</td>
<td>$2,432</td>
<td>$2,117</td>
<td>$315</td>
</tr>
<tr>
<td>06</td>
<td>$2,452</td>
<td>$2,300</td>
<td>$152</td>
</tr>
</tbody>
</table>

*The difference is the amount between what you will be paying, and what you will be receiving in your pay at the end of each month.*
LIST OF REFERENCES


“Army Family Housing Master Plan (FY 04-09),” February 2004.


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