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# Military Housing Privatization Initiative: Background and Issues

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# Military Housing Privatization Initiative: Background and Issues

### **Summary**

This report describes the Military Housing Privatization Initiative (MHPI), a pilot program authorized by Congress in 1996 to encourage privately-funded development of housing for use by members of the U.S. Military Services (including the Army, Navy, Marine Corps, and Air Force). The quality of housing available to members of the Military Services is considered one of the most important components (along with pay and quality of workplace) in defining the military's "quality of life," directly influencing the ability of the Military Services to retain personnel on active duty.

As part of the Department of Defense (DOD) effort to address its housing problems by a self-imposed deadline of 2010, the MHPI uses private sector alternatives to military housing construction, "leveraging" appropriated funds by providing federal supports to commercial real estate developers. Congress temporarily granted DOD 12 of these risk-reducing authorities, including the ability to convey or lease public property to private enterprise, to guarantee minimum occupancy rates, or to offer direct loans to real estate developers. While the Office of the Secretary of Defense retains general oversight and approval authority, the individual Military Services are responsible for the execution of projects on military installations.

The MHPI was originally authorized for five years, but few contracts were awarded. Despite its slow start, Congress has expressed confidence in the program and recently reauthorized it through December 31, 2004. The pace at which privatization contracts are being awarded has accelerated. While the MHPI has been applied only to family housing, DOD intends to expand it to include barracks and military dormitories.

Issues for Congress in its oversight of the program include the following. One issue is how to assess the program and its effectiveness. This is a difficult task, because both the problem of deteriorating housing and the solution of MHPI are complex. Family Housing Master Plans, expected to lay out in detail how each Service will resolve its housing deficiencies over the next decade, will be submitted to Congress soon and are expected to establish the benchmarks necessary for program assessment. DOD operates 300,000 military family housing units, but the ten MHPI projects currently under contract include only 6,900 of them, or less than 2.3% of the total. The MHPI alone cannot be a "silver bullet" remedy to substandard housing. Nevertheless, it can be assessed for its ability to provide cost-effective, quality housing quickly, and its use could be expanded. A second issue is: what are the alternative means of providing quarters for military personnel and their families? Domestic military housing is created through three methods: access to the civilian housing market, traditional military construction using appropriated funds, and MHPI development. More than 66% of Service members stationed within the United States use commercial housing. MHPI housing currently under contract or in solicitation accounts for less than 20% of the remainder, with military construction supplying the rest. DOD intends to resolve its housing shortfalls through a combination of those three alternatives.

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# Military Housing Privatization Initiative: Background and Issues

### **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. As a result, the Department of Defense (DOD) estimates that 180,000 of the 300,000 military family units that it owns and operates no longer meet its standards for adequate housing.

Approximately one-third of military families live in government-owned housing (the remainder live in privately owned or rented accommodations). Of these, DOD has determined that more than half do not meet its current housing standards with regard to living space, amenities, etc.<sup>1</sup> The Department has calculated that, by using its traditional methods of contracting and construction, 30 years and \$16 billion would be needed to resolve its family housing shortfall.

Historically, DOD has used a combination of two methods to house active duty personnel and their families. 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. This report examines the Military Housing Privatization Initiative (MHPI), a collection of twelve temporary "alternative authorizations" (as they are termed in the relevant legislation) intended for the speedy creation of quality military housing through the leveraging

<sup>&</sup>lt;sup>1</sup>Some Members of Congress have complained that construction planning by the Pentagon, and insufficient funding, have made it difficult for Congress to ensure that military construction meets priority programs such as family housing. For more information on military construction, see CRS Report RL30510, *Appropriations for FY2001: Military Construction*, by Mary T. Tyszkiewicz, one of a series of annual appropriations-related reports produced by the CRS.

of appropriated funds with private investment. DOD believes that a significant increase in the military housing allowance, a continuation of traditional construction, and expanded use of the MHPI will eliminate housing inadequacies by 2010.

The MHPI is not the first instance where the Congress has sought to leverage public appropriations in the creation of military housing, as explained below. Still, it stands out for the authority and flexibility in execution granted to the Department of Defense to engage in long-term contractual relationships with the private sector. MHPI was created as a five-year pilot project. Initial progress in creating new and refurbished housing was slow, and last year Congress extended the project's life through December 31, 2004. There are currently ten separate projects under contract across the United States encompassing some 6,900 housing units. Another 11 projects (adding more than 19,300 additional housing units) are in solicitation with private developers, with 25 additional projects in planning. There is no ceiling set on the number of units expected to be built or reconditioned under the MHPI.

### Military Housing as a Quality of Life Issue

Housing is a core component of the military quality of life matrix. In recent testimony before the House Appropriations Committee's Subcommittee on Military Construction (March 8, 2001), each of the senior enlisted members of the Military Services (the Sergeant Major of the Army, the Master Chief Petty Officer of the Navy, the Sergeant Major of the Marine Corps, and the Chief Master Sergeant of the Air Force) discussed the issues that their soldiers, sailors, airmen, and Marines believe are most important to their military careers and to their decisions to remain on active duty or leave the Service.

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. Current BAH rates cover 81.2% of the average rental cost of DOD-standard accommodation, leaving the remaining 18.8% to be drawn from the member's basic pay. Supporters of increased BAH funding argue that an increase sufficient to cover 100% of off-base housing costs would not only eliminate perceptions of inequity, but would ease the demand for on-base quarters by permitting more Service members to afford civilian housing.<sup>2</sup>

Throughout their testimony mentioned above, these senior enlisted members stressed that, with a large portion of the volunteer military force supporting families (approximately 70% of military personnel are married), the quality of life afforded those left at home has a direct and dramatic effect on the numbers and quality of those who decide to remain for a full 20-plus year active duty career. This, in turn,

<sup>&</sup>lt;sup>2</sup>A more detailed discussion of the budgetary impact of BAH adjustment, see Congressional Budget Office, *Budget Options for National Defense*, March 2000, ch. 4 (available through the CBO web site at [http://www.cbo.gov]).

can affect the experience, level of training, and ability the Services bring to bear on the missions they are assigned. Therefore, it is argued, the quality of military housing has a direct bearing on the retention of a proficient, capable volunteer career military force.

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.

## Three Key Military Housing Construction / Private Sector Initiatives

Wherry Housing.<sup>3</sup> 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.

**Capehart Housing.**<sup>4</sup> 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,

<sup>&</sup>lt;sup>3</sup>Wherry housing is named for Senator Kenneth Spicer Wherry of Nebraska, a World War I Navy veteran who sponsored the original bill.

<sup>&</sup>lt;sup>4</sup>Capehart housing was sponsored by Senator Homer E. Capehart of Indiana, a World War I Army veteran.

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.

**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 (see "The Importance of 'Budget Scoring'" below).

# The Military Housing Privatization Initiative Described

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.

#### The MHPI "Toolbox"

The MHPI includes twelve separate temporary authorities that revive some of the provisions of the earlier construction programs and add to them, while permitting their selective use where they can be most advantageous. These "alternative authorizations" include:

- 1. *Conveyance of real property*: The Government may transfer title of Federal property to private ownership.
- 2. Relaxation of Federal specifications for housing construction: Builders are allowed to construct housing in accordance with local building codes.
- 3. *Inclusion of ancillary support facilities*: Bids for contracts may incorporate additional amenities, such as child care centers and dining facilities, to enhance the attractiveness of the basic housing.
- 4. *Payment of rent by allotment*: Landlords may receive payment of rents through automatic electronic fund transfer from the appropriate Federal disbursing facility, guaranteeing cash flow.
- 5. Loan guarantee: The Government may guarantee up to 80% of the private sector loans arranged by the property developer.
- 6. *Direct loan*: The Government may make a loan directly to a contractor.
- 7. Differential Lease Payment (DLP): The Government may agree to pay a differential between the BAH paid to Service members and local market rents.
- 8. *Investment (Joint Venture)*: The Government may take an equity stake in a housing construction enterprise.
- 9. *Interim leases*: The Government may lease private housing units while awaiting the completion of a project.
- 10. Assignment of Service members: Service personnel may be assigned to housing in a particular project that they may otherwise not choose to occupy (tenant guarantee).
- 11. *Build to lease*: The Government may contract for the private construction of a housing project, then lease its units (similar to Section 801 programs).
- 12. Rental guarantee: The Government may guarantee a minimal occupancy rate or rental income for a housing project (similar to the Section 802 program).

### MHPI Background and Implementation

The Military Housing Privatization Initiative was created in Section 2801 of the National Defense Authorization Act for 1996 (P.L. 104-106) as a five-year pilot program within a 10-year plan to resolve the general military housing problem. Through the use of its "alternative authorizations," Congress intended to improve

military housing quickly and economically by leveraging the federal investment by encouraging private investment.

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. The first project award, known as NAS Corpus Christi / Kingsville I (Texas) for 404 units, was consummated in July of 1996. The second, termed Everett I (Washington) and encompassing 185 housing units, was awarded in March of 1997.

This experience contributed to a 1997 decision by DOD to extend its original housing solution target date of 2006 by four years to 2010. In addition, a 1998 GAO report faulted the cost analysis methodology used by DOD, indicated that actual savings would be considerably less than the Services claimed, and suggested that more effective use could be made of existing private market housing near military installations.<sup>5</sup> By the end of August 1998, more than three years into the five-year program, only three projects (the two cited above and another at Lackland Air Force Base, Texas, for 420 units) had been awarded contracts.

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.<sup>6</sup> Between the Lackland award and the approach of the end of the initial MHPI authorization in late 2000, only one additional project, Ft. Carson for 2,663 units, was finalized. A follow-up GAO report released in March of 2000 concluded that, because none of the contracted projects had yet been brought into full operation, there was little empirical data by which to assess whether the MHPI would achieve its goal of eliminating inadequate military housing more economically and faster than possible through the use of traditional construction practices.<sup>7</sup>

The program was set to expire during February 2001. Congressional concern with a perceived lack of results became apparent as expiration approached. The House Appropriations Committee Subcommittee on Military Construction, in its report on the Military Construction Appropriations Bill for Fiscal Year 2001, noted:

The Department of Defense intends to privatize approximately 40,000 housing units by December 2001. While the Committee supports the extension of the authority for this program, it continues to believe this is a pilot program. It is the

<sup>&</sup>lt;sup>5</sup>See General Accounting Office, Military Housing: Privatization Off to a Slow Start and Continued Management Attention Needed (GAO/NSIAD-98-178), July 1998.

<sup>&</sup>lt;sup>6</sup>The office's web site is located at [http://www.acq.osd.mil/installation/hrso/].

<sup>&</sup>lt;sup>7</sup>See General Accounting Office, *Military Housing: Continued Concerns in Implementing the Privatization Initiative* (GAO/NSAID-00-71), March 2000.

Committee's intent that several projects need to be completed to review the success of this program prior to privatizing additional housing units.<sup>8</sup>

Contracts for five additional MHPI projects were concluded between September and December of 2000 (Robins (Georgia) and Dyess (Texas) Air Force Bases, MCB Camp Pendleton I (California) and Kingsville II (Texas), and Everett II (Washington), adding more than 2,200 housing units), to bring the program to a total of ten contract awards and more than 6,900 housing units.

Additional congressional interest was indicated in the conference report on the Floyd Spence National Defense Authorization Act for Fiscal Year 2001. Contract award for the MHPI project at Patrick Air Force Base, Florida, had originally been anticipated for August of 2000. The Air Force had expressed an interest in partnering with a single private firm for the study of solicitations in this and future undertakings, leading to questions about the apparent competitiveness of any subsequent awards. The Act's conference report stated that:

The conferees note the innovative approaches undertaken by the Service secretaries in execution of the alternative authorities for the acquisition and improvement of military housing. The conferees remain strongly supportive of these authorities and believe competition in the private marketplace has resulted in a number of successful procurements after an early period of difficulty in program implementation. While supportive of a variety of innovative options to construct and acquire military housing under these authorities, the conferees were concerned that a methodology considered by the Secretary of the Air Force in the determination of the awardee of the housing privatization project at Patrick Air Force Base, Florida, appeared to be noncompetitive and to delegate the selection process to the private sector. The conferees are aware that the Secretary has subsequently directed a change in the solicitation process. The conferees reiterate that the use of competitive procedures should apply when exercising the alternative authorities for the acquisition and improvement of military housing, regardless of the process that may be used.

The Act, as subsequently enacted, extended the life of the MHPI until December 31, 2004. In addition, the Military Construction Appropriation Act for Fiscal Year 2001 (P.L. 106-246) directed each of the four Services to submit to the appropriate committees of the Congress not later than July 1, 2001, a Family Housing Master Plan to demonstrate how they intended to meet the DOD 2010 housing goal using a combination of traditional construction, operation and maintenance support, and privatization initiative proposals. The Initiative remains open-ended, having no established ceiling on the number of projects or units, but as of this writing it encompasses 46 separate projects and more than 54,700 units in various stages of planning, solicitation, and execution (see **Figure 1** on the next page).

<sup>&</sup>lt;sup>8</sup>H.Rept. 106-614 on HR 4425.

<sup>&</sup>lt;sup>9</sup>H.Rept. 106-945 on HR 5408.

<sup>&</sup>lt;sup>10</sup>These plans are to include, at a minimum, projected life cycle costs for family housing construction, Basic Allowance for Housing (BAH), operation and maintenance, other associated costs, and a time line for housing completions for each year. See H.Rept. 106-710 accompanying HR 4425.



Figure 1. Military Housing Privatization Projects, May 2001

### The MHPI Process

Central features of the MHPI are its flexibility and its decentralized execution. However, projects tend to follow the same general progression.

First, the need for additional housing at an installation, either through the renovation of exiting housing or construction of new dwellings, is established by a site review and feasibility study conducted by the appropriate Service. This examination includes an evaluation of the local private housing market and a cost-benefit comparison between the use of an MHPI package and traditional construction methods. The results are briefed to the OSD Office of Competitive Sourcing and Privatization. If the concept is judged adequate, it is approved and the Service is authorized to develop an appropriate solicitation proposal. Congress is notified before the completed solicitation is issued to private industry. Congress is again notified when the successful solicitation response is selected and before a contract is awarded.

There are two approaches to solicitation used in MHPI projects. The Navy (where the program is referred to as "public private venture") and Air Force ("housing privatization") issue detailed Requests for Proposals to the construction industry. <sup>11</sup> Navy and Air Force projects currently underway or contemplated range in scope from 80 units in the Hampton Roads area of Virginia to more than 3,200 around San Diego, California. Contractors who satisfy the Services that they can

<sup>&</sup>lt;sup>11</sup>Service housing privatization web sites are: Army [http://www.il.hq.af.mil/ile/ilei.html]; Navy [http://www.hsgnavfac.com/ppv/]; and Air Force [http://www.il.hq.af.mil/ile/ilei.html].

successfully complete the project respond with equally detailed project proposals, and selection is made from among them. The Army (under its "Residential Community Initiative") uses a Request for Qualifications process by which it screens and selects a "development partner" to undertake privatization work for an entire installation. The Army and its private partner then create a development concept (a "Community Development and Management Plan", or CDMP) for the project. Army proposals range from approximately 1,700 units at the Presidio of Monterey, in California, to more than 6,000 units at Ft. Bragg, North Carolina.

Though relatively few projects have reached the point of contract award, patterns of Service-specific contracting practices have emerged. Army projects tend to focus on the revitalization of existing housing stocks. The Air Force appears to favor the inclusion of the conveyance of Federal land in projects under its administration. The Navy appears to prefer engaging private developers in joint ventures (see **Table 1** in this report).

### The Importance of "Budget Scoring"

Budget scoring (or "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. 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.

Each of the authorities created for the MHPI has an associated budget score (see **Table 1**). The scoring used for the MHPI was drafted to comply with the Credit Reform Act of 1990 and the Budget Enforcement Act of 1990 (both laws were included within the Omnibus Budget Reconciliation Act of 1990 [P.L. 101-508]), as interpreted by Office of Management and Budget (OMB) Circular A-11 and specific MHPI Guidelines issued by the OMB on June 25, 1997.<sup>12</sup>

Budget impact of the use of various authorities ranges from none (such as the conveyance of non-revenue producing land or existing housing units to private developers or payment of rents by disbursing allotments),<sup>13</sup> through moderate (provision of a loan guarantee is scored at between 4% and 7% of the loan amount, while a direct loan to a contractor must be scored at 30% to 70%),<sup>14</sup> to high

<sup>&</sup>lt;sup>12</sup>The June 25, 1997, OMB scoring guidelines remain in effect only for first 20 projects that use MHPI authorities. They will be then be adjusted to incorporate any lessons learned.

<sup>&</sup>lt;sup>13</sup>Because base land and existing housing units produce no revenue stream, and therefore have no impact on budget surpluses and deficits, "pay-as-you-go" provisions of the Budget Enforcement Act require that conveyance be scored at 0%, regardless of the market value of such real property.

<sup>&</sup>lt;sup>14</sup>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.

(guaranteeing a minimum tenant occupancy rate to MHPI housing requires that the Net Present Value of the annual BAH for that number of tenants be assigned).<sup>15</sup>

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** demonstrates alternative options for the use of authorities to fund a hypothetical MHPI project and their budgetary impact.

Public/Private **Total Project** Options for Use of Requirement Components **Authorities** (DOD Budget Scoring Impact) Private Developer Equity \$4M Private Sector Project Mortgage Construction Cost (400 new units) \$40M \$30M Direct Loan (Option 1) (\$3M) Or DOD-funded Conveyed Units **Development** (Option 2) (Appropriated (**\$0**M) Or Fund Requirement) \$6M Differential Lease Or Payments (Option 3) (\$5M) Government Equity Stake (Option 4) (\$6M)

Figure 2. Project Financing Example

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

<sup>&</sup>lt;sup>15</sup>Net Present Value is a financial term defined as "the present value of the expected future cash flows minus the cost." In this case, it amounts to the value today of all the monthly payments to be made on the housing unit in the future minus the value today of the money expected to be received when the unit is sold.

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.

**Table 1** arranges the twelve alternative authorities in ascending order of budget impact and indicates those authorities used in the nine MHPI projects for which contracts have been awarded.

Table 1. Alternative Authorizations Ranked by Impact on Budget

Authority	Description	Benefit	Budget Scoring <sup>a</sup>	pact on Budget Where Used <sup>b</sup>
Authority	Description	Benefit	Budget Scoring"	wnere Used
Conveyance	Transfer of	Secure private	None - 0% of land	Lackland (AF)
or Lease of	ownership	financing,	value <sup>c</sup>	Ft. Carson (A)
Land or Units	- · · · · · · · · · · · · · · · · · · ·	immediate cash		Robins (AF)
		flow		Camp Pendleton I (NMC)
		now.		Kingsville II (NMC)
				Elmendorf (AF)
Unit Size &	Build to local	locally	None	Lackland (AF)
Type	codes	compatible,		Ft. Carson (A)
<i>71</i>		cost-effective		Everett I (NMC)
		construction		Corpus Christi (NMC)
Ancillary	Permit	Enhance project	None	Lackland (AF)
Support	supporting	attractiveness		Ft. Carson (A)
Facilities	amenities			Everett I (NMC)
				Corpus Christi (NMC)
Payment by	Guaranteed cash	Minimize rent	None	Lackland (AF)
Allotment	stream	payment		Ft. Carson (A)
		uncertainty		
Loan	Guarantee of	Lower interest	Low - 4% - 7% of	Lackland (AF)
Guarantees	private sector	rate, ensure	loan amount <sup>d</sup>	Ft. Carson (A)
	loan	financing		Robins (AF)
				Elmendorf (AF)
Direct Loan	Direct loan to	Below-market	Moderate - 30% -	Lackland (AF)
	contractor	financing	70% of loan	Robins (AF)
			amount <sup>e</sup>	Dyess (AF)
				Camp Pendleton I (NMC)
				Kingsville II (NMC)
				Elmendorf (AF)
Differential	Pay difference	Leverages	Moderate to High -	Everett I (NMC)
Lease	between BAH	private	NPV of DLP over	Everett II (NMC)
Payments	and market rents	financing	contract life	Corpus Christi (NMC)
(DLP)				
Investment	Equity	Partnership	Moderate to High -	Everett I (NMC)
(Joint	investment	interest	100% of cash	Everett II (NMC)
Venture)			equity	Corpus Christi (NMC)
				Kingsville II (NMC)
Interim	Government	Enables	Moderate to High -	
Leases	lease of other	immediate	NPV of lease	
	units until project	occupancy	payments during	
	conveyed		interim	
Assignment of	Members	Forces above	High - NPV of	
Members	assigned housing	market	BAH	
(Tenant	in project	occupancy rate		
Guarantee)	~	~ .		
Build to	Contract	Central	High - NPV lease	
Lease	construction,	payment by	payments	
	lease units	DOD (801-like)		
Rental	Guarantee of	Enhances	High - NPV rental	
Guarantee	occupancy or	financing	payments	
	rental income	(802-like)	udget Enforcement Act of	

a. Scoring in accordance with the Credit Reform Act and Budget Enforcement Act of 1990 (both part of the Omnibus Budget Reconciliation Act of 1990 [PL101-508]), OMB Circular A-11, and OMB MHPI Guidelines of June 25, 1997.

b. Project parent Service indicated by letters: AF=Air Force, NMC=Navy/Marine Corps, A=Army.

c. Because base land usually produces no revenue stream, and thereby has no impact on budget surpluses and deficits, "pay-as-you-go" provisions of the Budget Enforcement Act require that it be scored at 0%.

d. Scores for private source loan guarantees are calculated based on the degree of "exposure," or probability of default by the project's contractor under severely constrained conditions such as base closure.

e. Scores for DOD direct loans are calculated using the difference between the interest rate negotiated between the Service and contractor weighted by the probability of contractor default.

In this table, individual projects appear under several different authorities, indicating that the "toolbox" approach is, in fact, being used to configure solicitations to local real estate market conditions. However, it is noticeable that the projects principally make use of authorities of low or moderate budget scoring, while none applies authorities where the budget scoring is assessed as high. The largest single MHPI awarded to date (the 2,663 Army units at Ft. Carson, Colorado), combines five different authorities. Four of these have 0% budget scoring, while the fifth (loan guarantee) is rated low. The four projects that use authorities of moderate to high budget scoring (Navy developments at Everett I and II, Corpus Christi, and Kingsville II) cover a combined total of 1,027 units. This suggests that the system of budget scoring, combined with project size, may influence the combination of incentives offered to private developers in the course of solicitation development.

For the status and history of all planned and awarded MHPI projects, see **Table 2** at the end of this report.

### **Issues for Congress**

The creation of military housing has been compared to a three-legged stool. The first leg is the use of privately owned property in the local civilian housing market. Service members not housed in government-provided quarters are given an appropriated addition to their basic pay, in the form of a housing allowance, which they use to help pay for rented apartments or purchased homes. The second leg is traditional construction where quarters are built by private contractors on military reservations to military specifications and paid for out of appropriated military construction funds. The third leg is the construction of housing using a combination of public and private capital. As this pilot project explores many different ways in which public assets, such as existing housing, land, or funds, can be combined with private investment to create and operate public-private ventures to fill the housing needs of military members and their families, a number of questions arise of possible interest to Congress in exercising oversight of the program.

#### What Are the Prospects for the MHPI over the Short and the Long Terms?

The MHPI was expected to generate a significant number of housing units quickly and at minimal cost in appropriated funds. As became apparent during congressional consideration of the program's reauthorization, this has not yet been the case. The MHPI represents a dramatic revision in the way military housing is created, and the Department of Defense and the individual Services have had to create and adopt new ways of "doing business." This learning process is expected to continue throughout the program. The steepness of this "learning curve" offers partial explanation why the original five-year authorization period passed without the completion of significant numbers of new housing, and why the rate at which contracts have been awarded has recently accelerated. Projects begun between 1996 and 1999 included more than 3,600 housing units. During the subsequent 15 months, this number almost doubled.

Nevertheless, despite MHPI's accelerated rate of development, housing, once it has been created, must be managed and maintained, and the Department and Services will have to learn additional skills. The leasing of land to private enterprise, the loans made and guaranteed, and the commitments to joint ventures, may extend for up to a half-century. The know-how needed to effectively manage the complex mixture of public, public-private, and private housing likely to arise from the MHPI may prove to be as challenging to master as the original contracting. Private developers have been screened for their willingness to provide enduring project supervision, and provisions have been written into contracts to encourage adequate funding of continued operation and maintenance. Assessing both public and private management, with respect to the quality of life afforded to the Service member, cost to the taxpayer, long-term governmental liability, and sanctions imposed for nonperformance, may require years or decades.

Tied to the issue of long-term prospects of success for the MHPI is the subsidiary question of accurately predicting the need for housing. Three general variables appear enter into this calculation: Service culture, "base loading," and local housing availability.

Each military Service looks at the need for military housing through its own unique cultural lens. For example, the Army places great value on its "unit cohesion," and one of the ways the Service pursues cohesion is to encourage its soldiers to live in large government housing communities on military reservations. The Navy, on the other hand, focuses its attention on cohesion at the workplace (the ship or aviation squadron), and sailors are more likely than soldiers to prefer living in the local civilian community away from the military installation.

"Base loading" refers to the number of military members assigned to units stationed at a particular installation. In areas where there are many large units assigned, such as Ft. Hood, Texas, or the Hampton Roads area of Virginia, this number, in both absolute numbers and as a percentage of the total population, can be quite high. It is a variable that can change in short order, dramatically altering local military housing requirements. For example, the shifting of a single aircraft carrier from one home port to another can force the sudden relocation of approximately 2,000 families lost to the original port area and burdening the new one. The closing of a base can exert an even stronger influence on requirements by eliminating the military population altogether.

Local housing availability is a variable in two dimensions – quantity and affordability. Some military installations have been built within metropolitan areas, or have seen large populations grow up around them. Others are placed in sparsely populated locations where the off-base housing market is small. Where commercial housing is plentiful, it may be beyond the means of military members to purchase or rent. Demand for government-furnished housing will be relatively high where outside housing either does not exist or is not affordable. Yet, where vacant civilian housing is present in quantity, demand for government quarters can be expected to be a function of the tradeoff between market cost and military compensation. As the combination of basic pay and Basic Allowance for Housing rises relative to local rent and mortgage costs, a proportionate decrease in the need for military housing can be expected.

Taken together, these factors complicate the challenge of assessing the longterm prospects of success for the Initiative. Most analysts believe its efficacy will most likely become apparent only after the passage of several years of observing how its various projects evolve.

#### **How Can the MHPI Be Made More Effective?**

The different military cultures and the variety of different approaches possible under the twelve temporary alternative authorities render even the definition of "effectiveness" problematic. Nevertheless, there are two avenues that could be pursued in gauging the influence of the MHPI on military housing.

The first of these centers on examining the impact of budget scoring on the type of actions taken in the creation of individual MHPI projects. As indicated in **Table 1**, no MHPI agreements yet finalized involve authorities scored at high budget impact. Most undertakings are concentrated in authorities with little or no budget impact. Nevertheless, some of these transactions, such as the conveyance to private hands of public land or existing housing units, represent a loss to the government of assets of real value. It may be worthwhile to consider how practices encouraged by budget scoring may be exerting an artificial pressure on the crafting of business agreements. OMB has already adjusted some of its scoring requirements and will reexamine the entire budget scoring matrix when the 20<sup>th</sup> MHPI project is awarded (10 have been launched to date).

The second approach deals with traditional military construction practices. It is not clear whether lessons learned in the creation of MHPI projects can be applied to standard military housing construction and maintenance. Nevertheless, experience thus far has indicated that private building contractors enjoy relative freedom under the MHPI to employ local building practices, materials, labor, etc., that may not be available to them under conventional contract arrangements. This raises the issue of whether or not to consider modifying orthodox construction procedures based upon practices embodied in the MHPI.

#### If the MHPI Does Not Meet its Goals, Are There Alternatives?

The only definitive goal set by DOD is to have all military personnel and their families adequately housed by the target date of 2010. This goal inevitably takes the form of a supply and demand equation. The military force structure, including authorized manpower ceilings for each Service (Army, Navy, Air Force, and Marine Corps) and force composition within each Service (numbers of submarines vs. aviation squadrons, infantry vs. armored division, or F-15 vs. B-2 wings) make up the demand side. A change in any one of these factors will change the balance between supply and demand and will affect the perception of success or failure of the Department's effort to meet its housing goal.

Each Service is developing its own Family Housing Master Plan, which takes into account the need for housing at each military installation and which is expected to be amended when ships are shifted between home ports, aircraft wings are stood up or disestablished, or the missions of ground units (and their locations) are changed. These Master Plans will combine traditional military, public-private, and private commercial efforts in their attempts to hit the moving target of installation-specific housing demand. Careful, continuous study of these Master Plans, with their

expected cost-benefit comparisons between the three modes of housing supply, appear to offer an opportunity to gauge whether adequate progress is being made.

Table 2. Military Housing Privatization Initiative Project Status

Facility	Units	In Planning	In Solicitation	Closing/ Award
NAS Corpus Christi / Kingsville I, TX	404			Jul 96
Everett I, WA	185			Mar 97
Lackland AFB, TX	420			Aug 98
Ft. Carson, CO	2,663			Sep 99
Robins AFB, GA	670		Before Jan 00	Sep 00 <sup>a</sup>
Dyess AFB, TX	402		Before Jan 00	Sep 00 <sup>b</sup>
MCB Camp Pendleton I, CA	712		Before Jan 00	Nov 00 <sup>c</sup>
NAS Kingsville II, TX	150		Before Jan 00	Nov 00 <sup>a,d</sup>
Everett II, WA	288e		Before Jan 00	Dec 00f,g
MCLB Albany, GA / Camp Lejune, NC	100 <sup>h</sup>		Before Jan 00	Jan 01 <sup>f</sup>
Ft. Hood, TX	5,912 <sup>i</sup>		Before Jan 00	May 01 <sup>j,k</sup>
NC San Diego (Ph. I), CA	3,248		Before Jan 00	May 01 <sup>1</sup>
NC New Orleans, LA	935 <sup>m</sup>		Before Jan 00	Mar 01 <sup>n</sup>
Ft. Lewis, WA	3,955°		Before Jan 00	Apr 01 <sup>n,p</sup>
Elmendorf AFB, AK	780 <sup>q</sup>		Before Jan 00	Mar 01 <sup>1,r</sup>
NC South Texas, TX	661 <sup>s</sup>		Before Jan 00	Jun 01 <sup>n</sup>
Kirtland AFB, NM	1,164 <sup>t</sup>	Before Jan 00	Jan-Jul 00	Aug 01 <sup>u</sup>
Goodfellow AFB, TX	258		Jan-Jul 00	Aug 01 <sup>k</sup>
Ft. Meade, MD	3,170	Before Jan 00	Jan-Jul 00	Nov 01
NC Hampton Roads, VA	80	Jan-Jul 00		Dec 01
Stewart Army Subpost, NY	171°	Before Jan 00	Jan-Jul 00	Jul 02 <sup>w</sup>
NC Pennsylvania Regional, PA	339	Jul 00-Jan 01		Nov 02
Patrick AFB, FL	522 <sup>x</sup>		Before Jan 00 <sup>y</sup>	TBD <sup>1</sup>
Wright-Patterson AFB, OH	1,536	Before Jan 00		
McGuire AFB / Ft. Dix, NJ	TBD <sup>z</sup>	Before Jan 00		
Dover AFB, DE	450	Before Jan 00		

Facility	Units	In Planning	In Solicitation	Closing/ Award
Little Rock AFB, AR	1,535	Before Jan 00		
Vandenberg AFB, CA	506	Before Jan 00		
Moody AFB, GA	606ªa	Before Jan 00		
Offutt AFB, NE	2,415 <sup>bb</sup>	Before Jan 00		
Charleston AFB, SC	470 <sup>cc</sup>	Before Jan 00		
Hill AFB, UT	1,116	Before Jan 00		
MCAS Beaufort, SC / Parris Isle, SC / Camp Lejune, NC	1,645 <sup>dd</sup>	Before Jan 00		
Ft. Bragg, NC	6,066	Jan-Jul 00		
Ft. Campbell, KY	5,222	Jan-Jul 00		
Ft. Stewart / Hunter, GA	3,273	Jan-Jul 00		
Tinker AFB, OK	730	Jan-Jul 00		
Presidio of Monterey, CA	1,713	Jan-Jul 00		
NC San Diego (Ph. II), CA	TBD	Jul 00-Jan 01		
MCB Camp Pendleton (follow on), CA	TBD	Jul 00-Jan 01		
MCB Kaneohe Bay, HI	TBD	Jul 00-Jan 01		
NC Charleston, SC	TBD	Jul 00-Jan 01		
NTC Great Lakes, IL	TBD	Jul 00-Jan 01		
NS Long Island, NY	TBD	Jul 00-Jan 01		
NSB New London, CT	TBD	Jul 00-Jan 01		
NAS Whidbey Island, WA	TBD	Jul 00-Jan 01		

**Source:** OSD Office of Competitive Sourcing and Privatization.

- <sup>a</sup> Originally scheduled for award Apr 00.
- <sup>b</sup> Originally scheduled for award Jul 00.
- <sup>c</sup> Originally scheduled for award Jun 00.
- <sup>d</sup> Changed from Oct 00.
- <sup>e</sup> Adjusted downward from 300 units between January and July 2000.
- f Originally scheduled for award May 00.
- g Changed from Nov 00.
- <sup>h</sup> Camp Lejune added to MCLB Albany and units adjusted downward from 114 between July 2000 and January 2001.
- <sup>i</sup> Adjusted downward from 6,631 units between July 2000 and January 2001.
- <sup>j</sup> Originally scheduled for award Sep 00.
- <sup>k</sup> Changed from Jan 01.
- <sup>1</sup>Originally scheduled for award Aug 00.
- <sup>m</sup> Adjusted upward from 763 units between January and July 2000.
- <sup>n</sup> Originally scheduled for award Dec 00.
- Open Adjusted downward to 3,589 units between January and July 2000 and returned to 3,955 between July 2000 and January 2001.

- <sup>p</sup> Changed from Mar 01.
- <sup>q</sup> Adjusted downward from 828 units between January and July 2000.
- <sup>r</sup> Changed from Sep 00 to May 01.
- <sup>s</sup> Adjusted downward from 812 units between January and July 2000.
- <sup>t</sup> Adjusted downward to 1,890.
- <sup>u</sup> Changed from Feb 01.
- <sup>v</sup> Adjusted downward from 200 units between July 2000 and January 2001.
- <sup>w</sup> Originally scheduled for award Nov 01.
- <sup>x</sup> Adjusted downward from 960 units between July 2000 and January 2001.
- <sup>y</sup> Moved to in-planning status between January and July 2000.
- <sup>z</sup> Adjusted upward from 900 units between January and July 2000, changed to TBD between July 2000 and January 2001.
- <sup>aa</sup> Adjusted downward from 696 units between July 2000 and January 2001.
- bb Adjusted downward from 2,580 units between July 2000 and January 2001.
- <sup>cc</sup> Adjusted downward from 488 units between July 2000 and January 2001.
- <sup>dd</sup> Camp Lejune added to MCAS Beaufort/Parris Isle and units adjusted upward from 684 units between July 2000 and January 2001.