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Co	ont	ents
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Letter		3
Executive Summary		6
Chapter 1 Introduction	DOD's Housing Problem The Military Housing Privatization Initiative Previous GAO Report on the Privatization Initiative Objectives, Scope, and Methodology	16 16 17 19 19
Chapter 2 Privatization Progress Is Slow and Unanswered Questions Remain	Status of the Privatization Initiative Implementation Has Been Slower Than Expected DOD Has Curtailed Privatization Plans Eliminating Inadequate Housing by Fiscal Year 2010 Is Questionable More Progress Needed to Measure Initiative's Overall Effectiveness Conclusions Recommendation Agency Comments and Our Evaluation	22 22 25 27 28 28 32 32 32 32
Chapter 3 Life-Cycle Cost Analyses Lack Consistency and Reliability and Indicate Modest Potential Savings	The Services' Life-Cycle Cost Analyses Lack Consistency and Reliability Overall Projected Savings Are Modest DOD Had Not Issued Final Guidance for Life-Cycle Cost Analyses Conclusions Recommendation Agency Comments and Our Evaluation	34 36 38 39 39 40
Chapter 4 Continued Efforts Needed to Integrate Privatization With Other Housing Options	Required Integrated Housing Strategy Has Not Been Developed Slow Progress in Improving Housing Requirements Determinations Updated Market Analyses Not Available for Some Privatization Projects Maximizing Use of Housing in Local Communities Is Least Costly but Difficult to Implement Conclusions	41 41 42 44 45 47
DTIC QUALITY INSPECTE	D 3	

Contents

	Recommendations Agency Comments and Our Evaluation				
Appendixes	Appendix I: Summary of Authorities in the Military Housing Privatization Initiative	50			
	Appendix II: DOD's Military Housing Privatization Program as of October 1999	52			
	Appendix III: Navy's Limited Partnership Agreements for Housing at Corpus Christi and Kingsville, Texas and Everett, Washington	53			
	Appendix IV: Life-Cycle Cost Comparisons for Privatization Projects Awarded or Approved for Solicitation as of October 1999	60			
	Appendix V: Comments From the Department of Defense				
	Appendix VI: GAO Contacts and Staff Acknowledgments	66			
Tables	Table 1: Privatization Projects as of October 1999	23			
labies	Table 2: DOD Family Housing Improvement FundTable 3: Comparison of Life-Cycle Cost Estimates for 12 ProjectsTable 4: Out-of-pocket Costs at Portland from January through	24 37			
	September 1999	54			
	Table 5: Occupancy at Portland in August 1999	55			
	Table 6: Out-of-pocket Costs at Kingsville from January through Contorna to 1000	56			
	September 1999 Table 7: Occupancy at Kingsville in August 1999	57			
	Table 1: Occupancy at hingsvine in ridgast 1000 Table 8: Out-of-pocket Costs at Everett from January through September 1999	58			
	Table 9: Occupancy at Everett in August 1999	59			

Abbreviations

DOD Department of Defense



United States General Accounting Office Washington, D.C. 20548

National Security and International Affairs Division

B-284453

March 30, 2000

The Honorable Conrad Burns Chairman The Honorable Patty Murray Ranking Minority Member Subcommittee on Military Construction Committee on Appropriations United States Senate

The Honorable David L. Hobson Chairman The Honorable John W. Olver Ranking Minority Member Subcommittee on Military Construction Committee on Appropriations House of Representatives

This report discusses the Department of Defense's Military Housing Privatization Initiative. As requested, we reviewed the implementation of the initiative to determine the status of current and planned family housing privatization projects, examine the accuracy of life-cycle cost analyses for proposed projects, and assess progress toward integrating the initiative with other military housing programs.

We are sending copies of this report to the Honorable William Cohen, Secretary of Defense; the Honorable Louis Caldera, Secretary of the Army; the Honorable Richard Danzig, Secretary of the Navy; General James L. Jones, the Commandant of the Marine Corps; the Honorable F. Whitten Peters, Secretary of the Air Force; and to interested congressional committees. Copies will also be made available to others upon request. If you or your staff have any questions on this report, please call me on (202) 512-5140. Major contributors to this report are listed in appendix VI.

Carol R Schuster

Carol R. Schuster Associate Director, National Security Preparedness Issues

GAO/NSIAD-00-71 Military Housing

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Executive Summary

Purpose

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 a 5-year pilot program, termed 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. Servicemembers, 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. To estimate and compare these costs as part of a project's approval process prior to solicitation, the services perform a life-cycle cost analysis. In response to a congressional mandate,¹ GAO addressed the following questions: (1) What is the status of the housing privatization initiative? (2) What is the accuracy of the services' life-cycle cost analyses that compare the cost of proposed privatization projects to comparable projects financed through military construction funds? (3) What progress is DOD making in coordinating and integrating the initiative with other family housing programs?

Results in Brief

Although initial plans for housing privatization were aggressive, actual progress has been slow. Almost 4 years after the program was initiated, DOD has awarded only two privatization contracts to build or renovate 3,083 military family housing units. Several more years will be required before all planned construction under these contracts is completed. The services plan to have 20 more projects, involving 27,911 units, awarded or approved for solicitation before the privatization authorities expire in February 2001. DOD explains that because this represents a new way of doing business, developing procedures and financial instruments and

¹See Conference Report for Fiscal Year 1999 Appropriations for Military Construction, Family Housing, and Base Realignment and Closure (House Report 105-647, July 24, 1998).

awarding contracts have taken more time than expected. Because progress has been slow and because the services have curtailed plans for using the initiative, it appears questionable whether the services will meet a DOD goal to eliminate all inadequate family housing by fiscal year 2010. Also, because no projects under the program have been completed, there is little basis for evaluating the effectiveness of the program in eliminating inadequate housing more economically and faster than could be achieved through traditional military construction financing. Until experience is gained in the actual operation of several projects, key questions will remain unanswered, such as whether (1) the military will need the housing over the 50-year terms of most projects, (2) developers will operate and maintain privatized housing in accordance with contracts, and (3) actual privatization costs and savings will be in line with DOD estimates. Although a formal evaluation plan could help answer these questions and assess the overall merits of the initiative as it is implemented, DOD has not developed such a plan.

GAO's review of the 2 privatization projects already awarded and 12 additional projects approved for solicitation found that the services did not prepare a life-cycle cost analysis for 2 projects approved for solicitation and that the analyses for the remaining 12 projects were incomplete, inaccurate, or inconsistently prepared primarily because DOD had not issued standardized guidance for preparing the analyses. For example, seven did not include costs for project planning and design and three did not consider the value of government property to be conveyed to the developer as part of the agreement. After making adjustments to provide consistency, considering all project costs under both options, and correcting other errors, GAO found that over the life of the projects the privatization option, on average, would be about 11 percent less costly than comparable projects financed with military construction funds. Two privatization projects would cost more than comparable projects under the military construction option, but DOD stated that these projects were approved because they were still in the military's best interest.

DOD has made progress in coordinating this initiative with other housing options, such as housing allowances and military construction, by increasing use of cross-organizational panels that review and coordinate housing policies and issues. However, it has not finalized an overall integrated housing strategy for addressing its housing needs in a manner that considers the interrelationships among these options, as directed by a

congressional committee and as previously recommended by GAO.² DOD's January 2000 announcement of a new initiative to significantly increase housing allowances over the next 5 years makes a well-developed strategy that balances the various housing options even more important. For example, implementation of the new housing allowance initiative most likely will make more housing in local communities affordable to servicemembers, reduce the demand for on-base housing, and increase the cost of privatized housing relative to housing constructed with military construction funds since, under privatization, housing allowances are paid to the developers as rent. Also, the services have not improved their housing requirements determination processes to more accurately estimate how much housing the installations must supply and they have not always updated their housing requirements assessments prior to approving privatization projects. As a result, the services cannot be assured that they are constructing, replacing, or revitalizing housing only at installations where the need for additional housing is adequately documented.

GAO is recommending that DOD develop an evaluation plan for the initiative, improve policy guidance, and require that housing requirements assessments be updated as part of the approval process for proposed privatization projects.

Background

DOD spends about \$8 billion annually to provide housing for families of active-duty military personnel. DOD's policy is to rely on the housing in local communities near military installations as the primary source of family housing. About two-thirds of military families in the United States live in private housing and receive a cash allowance to help defray the cost of renting or purchasing a home. The other one-third lives in governmentowned or -leased housing. These families forfeit their housing allowance but pay no out-of-pocket costs for housing or utilities. Studies show that the cost to the government is significantly less when military families are paid a housing allowance and live in housing in the local communities as compared to providing government-owned housing. This is largely because housing allowances only cover an average of 81 percent of the costs of offbase housing and servicemembers must pay the rest out-of-pocket. However, in January 2000, DOD announced a new \$3 billion initiative that would significantly increase servicemembers' housing allowances over the

²House Report 105-647, July 24, 1998, and *Military Housing: Privatization Off to a Slow Start* and Continued Management Attention Needed (GAO/NSIAD-98-178, July 17, 1998).

	Executive Summary
	next 5 years. If this initiative is implemented as planned, the inequity in
	housing costs between servicemembers who live on-base and off-base would be eliminated because out-of-pocket costs for the typical military
	family would be reduced to zero.
	According to DOD, the quality of government-owned housing has declined for more than 30 years primarily due to a lack of priority. Because of concerns that poor quality housing could cause servicemembers to leave
	the military, DOD proposed a privatization initiative aimed at solving its housing problem more economically and faster than under traditional means by taking advantage of the private sector's investment capital and housing construction expertise. The resulting legislation authorized the
	Military Housing Privatization Initiative, which 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. By reducing the amount of government funds initially required to revitalize
	housing, DOD planned to quicken the pace of housing revitalization. DOD's
	Competitive Sourcing and Privatization Office provides oversight of this
	program, but primary responsibility for implementing it rests with the
	individual services.
Principal Findings	
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Privatization Progress Is	DOD has made limited progress in implementing the privatization initiative.
Slow and Questions Remain	At the beginning of the program in 1996, DOD expected to award about 8 to
Unanswered	10 projects for up to 2,000 family housing units within a year and increase
	this total to 8,000 in fiscal year 1997. In 1998, DOD said that the services
	were planning privatization projects totaling about 87,000 units at 49 installations before the authorities expired in fiscal year 2001. However, as
	of January 2000, contracts for only 2 projects containing about 3,100 units
	had been awarded. According to DOD, progress has been slower than
	expected because the initiative represents a new way of doing business for
	both the military and the private sector. Many initial legal, financial,
	contractual, and budgetary issues had to be resolved to the satisfaction of parties representing the government, developers, and private lenders
	before the initiative could proceed.

	In the Conference Report for the 1999 Military Construction Appropriations Act, the conferees cited concern over the slow pace of the initiative's implementation and the high level of reliance that the services had begun to place on the initiative relative to other housing options. ³ The report noted that the initiative was a pilot project and not intended to become a substitute for the traditional housing construction program. In response to this report, and a subsequent House Committee on Appropriations, Subcommittee on Military Construction, letter to the Secretary of Defense that cited similar concerns, the services scaled back their privatization plans to the current program consisting of 22 projects to build or renovate 30,994 units.
	Because no projects under the initiative have been fully implemented, there is little basis to evaluate whether this program could ultimately achieve its goals of eliminating inadequate housing more economically and faster than could be achieved through traditional military construction financing. Also, despite the fact that this pilot program is 4 years old, DOD has not developed an overall evaluation plan to assess the program's merits. Without an evaluation plan, DOD has no means to systematically compare the actual cost and implementation time frames of privatized projects to traditional military construction projects, assess the advantages and disadvantages of the various authorities, measure contractor performance, or assess servicemembers' satisfaction with the privatized housing. Timely, complete, accurate, useful, and consistent performance data could help decision-makers evaluate the overall effectiveness of the initiative, determine whether the initiative is meeting program goals, and identify what modifications might be needed as the program is implemented over the next several years.
Life-Cycle Cost Analyses Are Incomplete, Inaccurate, and Overstate Savings	For the 2 privatization projects already awarded and the 12 projects approved for solicitation, GAO found that DOD did not prepare a life-cycle cost analysis for 2 projects and that the analyses for the remaining 12 projects were inaccurate, inconsistently prepared, or lacked support for some assumptions used. For example, the Marine Corps' life-cycle cost analysis for its proposed 712-unit privatization project at Camp Pendleton estimated that the government would save \$28 million, or about 17 percent, compared to military construction over the 50-year term of the project. However, the analysis did not consider the value of 512 government
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³House Report 105-647, July 24, 1998.

housing units that will be conveyed to the developer, the costs of project development and solicitation, and the costs of monitoring the privatization contract. GAO's recalculation of costs after making adjustments showed that privatization would save the government considerably less-about \$11 million, or 5 percent.

In addition, the analyses for two projects approved for solicitation indicate that privatization costs will exceed the costs of comparable projects financed through the military construction program. Specifically, life-cycle cost estimates for planned projects at Robins Air Force Base, Georgia, and Stewart Army Subpost, New York, showed that privatization would cost more than military construction financing—9 percent and 15 percent, respectively. However, DOD officials stated that these privatization projects were still in the best interest of the military because the housing improvements could be completed faster and with substantially less initial government funds.

For the two projects without life-cycle cost analyses, DOD explained that the Army did not prepare a life-cycle cost analysis for a proposed project at Fort Hood because it had not settled on the scope of the project or selected a developer to help it plan the project. Also, the Marine Corps had not prepared an analysis for a planned project at Marine Corps Logistics Base, Albany, Georgia, because officials assumed that an analysis was not needed since the proposed project required no initial government funds. DOD officials stated that a life-cycle cost analysis is required regardless of the terms of individual projects and that an analysis should have been prepared for this project.

Although DOD agreed with a July 1998 GAO recommendation that DOD expedite efforts to develop a standard methodology to assist the services in performing these analyses, GAO found that DOD had not issued such guidance as of January 2000.⁴ DOD had developed draft guidance for performing the analyses, but its use was not mandatory. Also, although the draft guidance generally identified the costs that should be considered in analyzing each alternative, it did not include details on how to estimate each type of cost or when it is appropriate to approve a proposed privatization project that costs more than a comparable military construction project.

⁴Military Housing: Privatization Off to a Slow Start and Continued Management Attention Needed (GAO/NSIAD-98-178, July 17, 1998).

	Executive Summary
	All of the life-cycle analyses prepared to date may understate privatization costs because DOD is in the process of increasing the housing allowances servicemembers use to pay for rent and utilities in privatized housing. If DOD fully implements the housing allowance initiative, privatization savings will be less than currently estimated.
Continued Efforts Needed to Integrate Privatization With Other Housing Options	To maximize the advantages from the initiative and minimize total housing costs, privatization needs to be part of an integrated strategy that includes coordinated decisions on the structure of housing allowances and housing construction, accurate determinations of housing needs, and maximum use of private sector housing in accordance with DOD housing policy. Yet, as o January 2000, DOD had not completed development of an integrated housing strategy showing how the various housing options will be used to meet DOD's housing needs in an optimum manner. In the previously mentioned 1999 Appropriations Act Conference Report, DOD was directed to prepare a report on such a strategy by December 1, 1998. DOD officials stated that the delay was caused by a lack of staff and that the report should be issued soon.
	DOD has taken steps to improve coordination on housing issues, including increased use of a policy board to review and coordinate issues, such as military housing, that cross functional and organizational lines and directly affect installations. Members of the board include officials from the separate DOD offices responsible for military housing construction and housing allowances. DOD also created a policy panel to focus solely on military housing issues by reviewing and coordinating housing matters at the staff working level.
· · · ·	DOD also has made little progress in improving its processes for determining how much housing the military must provide at installations versus how much local communities could be expected to supply, which is a critical element of an overall strategy. Prior GAO and DOD Inspector General work has highlighted long-standing problems in the processes the services use to determine their housing requirements that can result in overstating on-base housing needs. ⁵ Accurate assessments of requirement are important because it generally costs more to house servicemembers of

⁵Military Family Housing: Opportunities Exist to Reduce Costs and Mitigate Inequities (GAO/NSIAD-96-203, Sept. 13, 1996) and DOD Family Housing Requirements Determination, DOD Inspector General Report No. 98-006, Oct. 8, 1997.

	Executive Summary
	base than to pay housing allowances for servicemembers to secure housing in local communities. In December 1997, DOD convened a cross-service working group to develop recommendations for improving its processes for determining housing requirements. However, DOD decided that the task was too big for the group, and in January 1999, it contracted with the Center for Naval Analyses for a complete review of the processes being used. According to DOD, the results of this review, expected by summer 2000, will be used to improve the processes.
	DOD's Housing Management Manual 4165.63M states a housing market analysis should be performed at installations where acquisition of housing is planned to help determine military housing needs and the ability of the local communities to meet these needs. Although housing market analyses had been prepared within the past 5 years at 9 of the 14 installations with a privatization project awarded or approved for solicitation, GAO found that no housing market analysis had been prepared within the past 5 years for the remaining 5 installations. Although these analyses are important to accurately estimate housing requirements, updated analyses have not been specifically required as part of the approval process for proposed privatization projects.
Recommendations	GAO makes several recommendations concerning implementation of the privatization initiative, particularly in view of DOD's new plans to increase housing allowances. GAO is recommending that the Secretary of Defense develop an evaluation plan for the initiative, improve agency guidance related to life-cycle cost analyses, clarify guidance for approving a privatization project when the project's estimated total costs exceed the costs to implement the project with military construction funds, and require that housing requirements assessments be updated as part of the approval process for proposed privatization projects.
Agency Comments	DOD agreed with GAO's recommendations. DOD stated that a privatization evaluation plan is necessary and that such a plan should be ready for review by the services in late summer 2000. DOD also stated that it (1) intends to issue refined guidance for life-cycle cost analyses that will require the services to examine the costs of privatization and military construction alternatives in a uniform and comprehensive manner and (2) is establishing a senior-level, joint Housing Policy Panel to provide policy for determining housing requirements and to establish clear policy

for satisfying those requirements. DOD disagreed that the life-cycle costs for future privatization projects would necessarily increase if basic housing allowances were increased as planned. To ensure that life-cycle costs do not increase, DOD said that it would use mechanisms, such as revenue sharing accounts, in its contracts to offset this increased cost. GAO believes that the actions planned by DOD will improve implementation of the privatization initiative. With respect to the effect of increased housing allowances on the life-cycle costs of future privatization projects, GAO notes that DOD cannot be ensured that contractors would accept new mechanisms that would limit government costs. If they do not, the costs of privatized housing would increase since rents are determined on the basis of the allowances.

DOD's comments and GAO's evaluation of them are discussed in the report where appropriate. These comments are provided in their entirety as appendix V.

GAO/NSIAD-00-71 Military Housing

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Introduction

	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. The housing allowance, which totaled about \$4.5 billion in fiscal year 1999, covers about 81 percent of the typical family's total housing costs, including utilities. The families pay the remaining portion of their housing costs out of pocket.			
	About 265,000, or one-third, of the military families live in government- owned or -leased housing. These families forfeit their housing allowances but pay no out-of-pocket costs for housing or utilities. In fiscal year 1999, DOD spent about \$2.8 billion to operate and maintain government-owned and -leased family housing. In addition, about \$740 million was authorized to construct and renovate government family housing units in fiscal year 1999.			
DOD's Housing Problem	According to DOD, access to affordable, 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. In March 1999, the Acting Deputy Under Secretary of Defense (Installations) testified before the Congress that about 200,000 of the military family housing units were old,			

below contemporary standards, and in need of extensive renovation or

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	Chapter 1 Introduction
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	replacement. ¹ He estimated that fixing this problem using only traditional military construction financing would take 30 years and cost as much as \$16 billion.
·	To address its housing problem, DOD has undertaken several initiatives. To make privately owned housing more affordable to military members, the 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. According to DOD, it plans to ask the Congress to approve funding that would reduce average out-of-pocket housing costs from about 19 percent in calendar year 2000 to 15 percent in calendar year 2001, with continued reductions each year thereafter, eliminating such costs entirely by year 2005. DOD estimated that this initiative will cost more than \$3 billion over the next 5 years and planned to allocate these funds from overall DOD budget increases that it will request over this period.
The Military Housing Privatization Initiative	In May 1995, DOD proposed an initiative to improve the quality of its military housing inventory. This initiative, known as the 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

¹Hearings before the Subcommittee on Military Installations and Facilities, House Committee on Armed Services, Mar. 9, 1999. Chapter 1 Introduction

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, 1996.² However, the Congress limited the new authorities to a 5-year test period to allow DOD to assess their usefulness and effectiveness in improving the housing situation. Based on the results of the test, the Congress will consider whether the authorities should be extended or made permanent. (See app. I for a complete list and description of the authorities.)

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.

In anticipation of the enactment of the new privatization authorities, DOD established the Housing Revitalization Support Office in September 1995 to facilitate implementation of the initiative. This office established the financial and legal framework for the new initiative and assisted the services in using the initiative. In August 1998, DOD shifted primary responsibility for implementing the initiative to the individual services. With this change, the office was eliminated, and housing privatization oversight responsibility was assigned to the newly created Competitive Sourcing and Privatization Office. As part of its oversight responsibilities,

²The National Defense Authorization Act for Fiscal Year 1996 (P. L. 104-106, section 2801).

	Chapter 1 Introduction
	the new office establishes DOD policy for the initiative and monitors
	implementation of the program.
Previous GAO Report on the Privatization Initiative	Because it represented a new approach to improving military housing, we reviewed DOD's implementation of the new initiative between June 1997 and March 1998 and issued a report in July 1998. ³ The report, which included recommendations to DOD for improving the initiative, noted that implementation of the initiative was off to a slow start and, that in addition to potential benefits, the initiative raised several concerns, including whether privatization will result in significant cost savings and whether the military will need the housing over the long term—50 years—proposed for many projects. The report also noted that privatization is only one of several options, including housing allowances and military construction, available to address the housing problem and that DOD had not fully integrated these options into an overall housing strategy to meet its housing needs in an optimum manner.
Objectives, Scope, and Methodology	As mandated in the Conference Report for Fiscal Year 1999 Appropriations for Military Construction, Family Housing, and Base Realignment and Closure, we reviewed implementation of the Military Housing Privatization Initiative. ⁴ Specifically, we (1) determined the status of family housing privatization projects, (2) examined the accuracy of the services' life-cycle cost analyses that compared the cost of proposed privatization projects to comparable projects financed through military construction funds, and (3) assessed how the initiative was being integrated with other family housing programs. We performed work at the Competitive Sourcing and Privatization Office and at the DOD offices responsible for housing management and housing allowances. We also performed work at the Air Force, the Army, the Navy, and the Marine Corps headquarters offices responsible for implementing the initiative. At each location, we interviewed responsible agency personnel and reviewed applicable policies, procedures, and documents.

³Military Housing: Privatization Off to a Slow Start and Continued Management Attention Needed (GAO/NSIAD-98-178, July 17, 1998).

⁴House Report 105-647, July 24, 1998.

To determine the status of family housing privatization projects, we reviewed DOD's and the services' privatization project plans, compared the plans to actual progress, and explored reasons for differences. We identified the privatization authorities used or planned for each proposed project, reviewed funding for the projects and the initiative, estimated the leveraging of funds for approved projects, assessed DOD's and the services' plans for measuring the effectiveness of the initiative, and discussed concerns about the initiative with DOD and service officials. In addition, we visited Navy privatization projects at Corpus Christi and Kingsville, Texas, and Everett, Washington, that were originated under a previous authority to test the use of limited partnerships. (New privatization projects also are planned at these locations.) We also visited Fort Carson, Colorado; Lackland Air Force Base, Texas; and the Marine Corps Logistics Base, Albany, Georgia. At each installation, we reviewed housing conditions and occupancy statistics, assessed the status of privatization plans for projects that are underway or planned, and discussed with local service officials their views of the initiative.

To examine the accuracy of life-cycle cost analyses for proposed privatization projects, we reviewed DOD guidance for performing such analyses, and for each project approved for solicitation, we examined the project's life-cycle cost analysis. In our review, we (1) assessed adherence to guidance, (2) reviewed the assumptions and data used and the documentation supporting each analysis, (3) checked the accuracy of the calculations, and (4) performed an alternative life-cycle cost analysis if the original analysis excluded some applicable costs, used incorrect assumptions or data, or contained other problems. When proposed projects included the conveyance of government property, we generally used the services' estimates for the property's value in our alternative analyses because it was beyond the scope of our review to perform independent property appraisals. In January 2000, as our report was being finalized for publication, the Secretary of Defense announced plans to significantly increase housing allowances over the next 5 years. We have noted throughout our report the potential effects of this new initiative on our findings and analyses if the initiative is fully implemented as planned.

To assess how the initiative was being integrated with other family housing programs, we reviewed DOD's and the services' housing policies, programs, initiatives, and plans. We also reviewed previous reports and studies related to military housing issues and discussed with DOD and service officials how they dealt with areas identified as needing improvement. Chapter 1 Introduction

We conducted our review from May 1999 through January 2000 in accordance with generally accepted government auditing standards.

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Privatization Progress Is Slow and Unanswered Questions Remain

	Although initial plans and goals were aggressive, DOD's actual progress in using the privatization initiative to help eliminate the 200,000 inadequate family housing units has proceeded slowly. As of January 1, 2000, almost 4 years after the authorities were signed into law, DOD had awarded only two privatization contracts to build or renovate 3,083 military family housing units, and several more years will be required before this work is completed and the units are occupied. Because progress has been slow and because the services have curtailed plans for using the initiative, it appears questionable whether the services will meet a DOD goal to eliminate all inadequate family housing by fiscal year 2010. Also, until experience is gained in the actual operation of several projects, several key questions will remain unanswered, such as whether the military will need the housing over the 50-year terms of most projects and whether developers will operate and maintain privatized housing in accordance with contracts. Although a formal evaluation plan could help answer these questions and assess the overall merits of the initiative as it is implemented, DOD has not developed such a plan.
Status of the Privatization Initiative	As of January 1, 2000, DOD had awarded contracts for two military housing privatization projects. The first, at Lackland Air Force Base, was awarded in August 1998, and it calls for the construction of 420 family housing units. Construction, which began in April 1999, is expected to be completed in February 2001, although the first 92 units were ready for occupancy in January 2000. The second, at Fort Carson, was awarded in September 1999, and it calls for constructing 840 family housing units and renovating 1,823 units. The Fort Carson project was initially planned for award in February 1998, but as a result of litigation, the Army canceled the planned award and decided to resolicit the project. Army officials estimate that 4 or 5 years will be required to complete the construction and renovation phases of the project. Under both contracts, the contractors will construct the units on the base and will operate and maintain the units for 50 years. The services planned to have 20 additional projects awarded or approved for solicitation prior to the expiration of the authorities in February 2001. As shown in table 1, as of October 1999, 12 of these projects had been approved for solicitation, and 8 projects were in planning prior to starting

the solicitation process.¹ Together, the total housing units (30,994) in these projects and the two projects already awarded represent about 14.5 percent of the military's total U.S. family housing units. Appendix II contains more details on the planned projects.

Table 1: Privatization Projects as of October 1999

Service	Awarded	Ар	proved for sol	icitation	In planning prior to solicitation		Total	
	Number	Units	Number	Units	Number	Units	Number	Units
Army ^a	1	2,663	1	6,631	2	7,518	4	16,812
Air Force	1	420	3	1,900	5	5,029	9	7,349
Navy	0	0	5	5,123	0	0	5	5,123
Marines	0	0	3	1,026	1	684	4	1,710
Total	2	3,083	12	14,680	8	13,231	22	30,994

^aUnits for the Army, except for the awarded project at Fort Carson, are considered the maximum number—the final number of units could be less.

Source: Competitive Sourcing and Privatization Office, DOD.

Table 1 does not reflect two Navy projects (589 off-base units) approved under a prior legislative authority. The authority for these projects was not the legislation that established the privatization initiative, but was included in Public Law 103-337, enacted October 5, 1994. This law gave only the Navy authority to test the use of limited partnerships in order to meet the housing requirements of naval personnel and their dependents.² Appendix III provides details on the Navy's limited partnership agreements at Corpus Christi, Kingsville, and Everett.

Privatization Funds

Funding for the initiative is accomplished through two funds established by the 1996 authorizing legislation: the DOD Family Housing Improvement

¹For a project to be approved for solicitation (the competitive process to select a contractor for the project), DOD must first notify the Congress of its intent of entering into a housing privatization contract for the project. Thirty days after the notice, DOD can begin the process of selecting a developer for the project.

²See section 2803 of Public Law 103-337. The authority to use limited partnerships is now available to all services under the 1996 law establishing the privatization initiative.

Chapter 2 Privatization Progress Is Slow and Unanswered Questions Remain

Fund and the DOD Military Unaccompanied Housing Improvement Fund. 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.

As shown in table 2, from fiscal year 1996 through fiscal year 1999, \$49.0 million was appropriated for the DOD Family Housing Improvement Fund and about \$43.2 million was transferred into the fund from military construction appropriations. DOD used about \$23.2 million to fund family housing projects and about \$17.3 million to administer the initiative, including the costs of consultant support. Although the fund had a balance of about \$51.7 million at the end of fiscal year 1999, officials in the Competitive Sourcing and Privatization Office stated that about \$46.3 million was committed to funding future projects, leaving a fund balance of about \$5.4 million.

		Fiscal year			
	1996	1997	1998	1999	Total
Additions to fund					
Appropriations	\$22.0	\$25.0	\$0.0	\$2.0	\$49.0
Transfers from military construction		5.9	7.0	30.3	43.2
Total additions					\$92.2
Expenditures from fund					
Funding for projects	10.3	5.9	7.0	0.0	\$23.2
Administration and consultants	3.0	4.9	7.3	2.1	17.3
Total expenditures					\$40.5
Fund balance end of fiscal year 1999					\$51.7°

Table 2: DOD Family Housing Improvement Fund

^aAccording to officials in the Competitive Sourcing and Privatization Office, \$46.3 million is committed to future projects, leaving a balance of about \$5.4 million.

Source: Competitive Sourcing and Privatization Office.

For fiscal year 2000, \$2 million was appropriated to the fund for planning, administration, and oversight of the initiative. According to DOD, as additional privatization projects are awarded, military construction funds associated with the projects will be transferred into the fund and will be

	Chapter 2 Privatization Progress Is Slow and Unanswered Questions Remain
	used to pay for the initial award costs. In fiscal year 1997, \$5 million was appropriated for the DOD Military Unaccompanied Housing Improvement Fund. This amount was rescinded in fiscal year 1999 because the services had no plans for privatized unaccompanied housing projects, such as new or renovated barracks.
Use of the Privatization Authorities	Under the privatization legislation, the Congress provided DOD with 12 authorities to allow and facilitate private sector financing, ownership, operation, and maintenance of military housing. The authorities can be used individually or in combination. For the 2 privatization projects awarded and the 12 projects approved for solicitation as of October 1999, the services plan to use some of the 12 authorities, such as conveyance of property, direct loans, and loan guarantees, frequently. The services plan limited use of other authorities, such as the assignment of members to housing units constructed under the initiative. Three authorities (build and lease, rental guarantees, and interim leases) will not be used on these 14 projects. According to DOD officials, use of the build and lease and rental guarantee authorities usually involve government commitments to pay lease or rental costs over the entire term of the contracts. In accordance with the guidance for recording obligations under the initiative, DOD would have to set aside funds to cover the value of these commitments up front. Because the funds required to cover the commitments could approximate the amount of funds required under traditional military construction financing, use of these authorities might not result in DOD meeting its goal of obtaining at least \$3 of housing improvements for each dollar the government invests. Thus, DOD is not likely to use these authorities as part of a privatization arrangement.
Implementation Has Been Slower Than Expected	DOD was initially optimistic about how quickly the new privatization authorities could help solve its housing problem of 200,000 inadequate housing units. In a May 1995 press release, DOD stated that if the Congress passed legislation authorizing the use of private sector financing and expertise to improve military housing, DOD could solve its housing problem in 10 years—by fiscal year 2006. During congressional hearings in March 1996, after the initiative was authorized, DOD officials stated that about 8 to 10 projects, with up to 2,000 family housing units, should be

Chapter 2 Privatization Progress Is Slow and Unanswered Questions Remain

awarded within the next year.³ During March 1997 and 1998 congressional hearings, DOD officials stated that the goal was to increase the number of units planned for construction and revitalization to 8,000 in fiscal year 1997 and to 18,000 units in fiscal year 1998.⁴

DOD did not meet these goals, and in July 1997, it revised the target date when it issued planning guidance for fiscal years 1999 through 2003. The guidance directed the services to plan to revitalize, divest through privatization, or demolish inadequate family housing by or before fiscal year 2010—4 years later than the original target date. DOD also included housing privatization in its November 1997 Defense Reform Initiative Report as a specific initiative to help reduce excess infrastructure.

According to DOD officials, privatization implementation has been slower than expected primarily because the initiative represents a new way of doing business for both the military and the private sector. Initially, DOD had to develop protocols for site visits and new tools and models to assess the financial feasibility of using the various authorities to help solve the housing problem at an installation. Then, as detailed work began on developing potential projects, according to officials, many legal issues relating to the applicability of the Federal Acquisition Regulation and the Federal Property Management Regulations had to be addressed. Also, new financial and contractual issues had to be resolved, such as establishing loan guarantee procedures to insure lenders against the risk of base closure, downsizing, and deployment; developing a process to provide direct loans to real estate developers; and creating documents for conveying existing DOD property to developers.

Another factor that slowed implementation was initial disagreement between DOD and the Office of Management and Budget on how projects that used the various authorities should be scored.⁵ Discussions between the agencies continued for several months until a written agreement that provided detailed scoring guidance applicable to the first 20 privatization

³Hearings before the Subcommittee on Military Installations and Facilities, House National Security Committee, Mar. 7, 1996.

⁴Hearings before the Subcommittee on Military Readiness, House National Security Committee, Mar. 12, 1997, and the Subcommittee on Military Construction, House Appropriations Committee, Mar.12, 1998.

⁵Scoring refers to the process used to determine the amount that should be recognized and recorded as an obligation of DOD at the time a privatization contract is signed.

	Chapter 2 Privatization Progress Is Slow and Unanswered Questions Remain
	projects was adopted on June 25, 1997. After these projects are completed, the agreement will be reviewed to determine if any changes are needed.
DOD Has Curtailed Privatization Plans	The services' current privatization program of 22 projects is significantly smaller than previously planned. In 1998, the services planned privatization projects totaling about 87,000 units at 49 installations under the authorities. In the Conference Report for the 1999 Military Construction Appropriations Act discussed previously, the conferees cited concern over the slow pace of the initiative's implementation and the high level of reliance that the services had begun to place on the initiative compared to other options, such as military construction. The Conference Report provided guidance to DOD, stating that the services needed to use all available options to address the family housing problem, including the traditional military construction program and adequate use of existing private sector housing. The guidance noted that the initiative was a pilot project and not intended to become a substitute for the traditional housing construction program. Because of the guidance and expressed concerns, DOD took two steps. First, in August 1998, DOD announced that to help streamline the initiative, primary responsibility for implementation would shift from DOD headquarters to the individual services. Second, in October 1998, DOD stated it would provide the Congress with quarterly status reports containing project updates. However, DOD did not reduce its planned reliance on privatization to address its housing needs. The first quarterly report, issued in February 1999 for the first quarter of fiscal year 1999, listed 48 planned privatization projects involving about 87,860 units—about the same size program as identified previously.
·	In a June 1999 letter to the Secretary of Defense, the Subcommittee on Military Construction, House Committee on Appropriations, again noted that the initiative was a pilot program and was not a replacement for traditional military construction. Noting that the Army's and the Navy's fiscal year 2000 military construction budget requests included no family housing projects in the continental United States, the Subcommittee expressed concern that the initiative had veered off course from the original intent of the legislation. In its response, DOD wrote that both privatization and military construction will be necessary to rectify inadequate military housing and that privatization will be pursued as a pilot program to better understand the circumstances in which it is most effective. The letter included a scaled-down list of planned projects that was later refined into the current program consisting of 22 projects to build or renovate 30,994 units.

Chapter 2
Privatization Progress Is Slow and
Unanswered Questions Remain

Eliminating Inadequate Housing by Fiscal Year 2010 Is Questionable	Because privatization implementation has proceeded more slowly than expected and with scaled-back privatization plans, it appears questionable whether the services will meet DOD's goal of eliminating all inadequate family housing by fiscal year 2010. Army officials estimated that with their reduced privatization plans and with current military construction funding levels, about 44,000 inadequate Army houses will remain in the United States after fiscal year 2010. Air Force and Marine Corps officials also stated that it is questionable whether they can eliminate inadequate housing by 2010. In estimating the funds needed to meet the 2010 goal, the Air Force, in its August 1999 Family Housing Master Plan, identified a \$3.6 billion funding shortage. The Navy plans to meet the 2010 goal using current privatization plans and military construction funding. An official noted that the Navy had been investing in improved family housing for several years prior to the privatization initiative.
	According to DOD, an analysis has shown that (1) if DOD were to rely solely on military construction funding at current levels and no privatization beyond the current plans, inadequate housing units would not be eliminated until 2091 and (2) if the services were permitted to use the privatization authorities beyond their expiration date at a level consistent with current plans, inadequate housing would not be eliminated until 2019. However, DOD officials stated that it is still possible to meet the 2010 goal. First, DOD officials stated that they plan to request the Congress to extend the authorities beyond their expiration date in February 2001. Second, if the authorities are extended, the services could expand privatization plans. Third, implementation of the new initiative to increase housing allowances could help by reducing the need for some on-base housing.
More Progress Needed to Measure Initiative's Overall Effectiveness	An assessment of the status of the privatization initiative normally would include an assessment of how the initiative is doing in meeting its goals of eliminating inadequate housing more economically and faster than could be achieved through traditional military construction financing. However, no projects under the initiative have been fully implemented, occupied by military families, and operated over a period of time. As a result, at this time only limited information is available to assess the initiative's overall effectiveness in achieving its goals. The only actual experience with completed privatization projects comes from the Navy's projects completed under the prior authority, and this experience included some mixed results. Also, although the pilot initiative is almost 4 years old, DOD

	Chapter 2 Privatization Progress Is Slow and Unanswered Questions Remain
	has not established an evaluation plan that will help assess the merits of the initiative as it is implemented over the next few years.
Limited Data Exists to Assess Achievement of Goals	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. DOD's estimates for 12 proposed projects showed that for an average initial government cost of about \$14 million, the military should obtain new or renovated housing that would have initially cost the government about \$75 million if traditional military construction funds were used. As discussed in the next chapter, 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. In addition, increased housing allowances, as called for in the new initiative announced in January 2000, could increase privatization costs and reduce the estimated savings from privatization. Before actual privatization costs and savings are known, several projects will have to be constructed, occupied, and operated over a period of time.
	In our prior report on the privatization initiative, we noted that in addition to questions about long-term savings, privatization raises other concerns and questions. For example, will developers operate and maintain privatized housing in accordance with the contracts and in a manner that meets servicemembers' expectations? 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. Another question is whether 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. Also, if privatized units are not rented by servicemembers, the contracts allow civilians to rent the units, creating concerns about the impact of civilians living on base. 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.

Chapter 2 Privatization Progress Is Slow and Unanswered Questions Remain

Navy's Privatization Experience Shows Mixed Results	The only actual operating experience in housing privatization comes from the Navy's projects originated under the prior authority. These off-base projects in local communities at Corpus Christi and Kingsville, Texas, and Everett, Washington, have been considered successful in that they were implemented relatively quickly and should result in savings to the government. However, the projects also have included some mixed results. For example, although intended for enlisted families, many civilians, officers, and single servicemembers live in the Texas units, and the rental charges for all three sites have resulted in out-of-pocket costs for most enlisted paygrades that exceed the 19-percent national average, as shown by the following examples for August 1999.
	At Corpus Christi, civilians and officers occupied 25 percent and 8 percent, respectively, of the units. An enlisted paygrade E-5 occupant of a three- bedroom unit paid about \$191, or 31 percent, more for monthly rent and utilities than covered by the member's housing allowance. ⁶
	At Kingsville, only 11 of the 102 units were occupied by enlisted members with their families. The other units were occupied by single enlisted members, officers, and civilians. A paygrade E-5 occupant of a three- bedroom unit paid about \$185, or 33 percent, more for monthly rent and utilities than covered by the member's housing allowance.
	At Everett, 183 of the 185 units were occupied by enlisted members with their families. A paygrade E-5 occupant of a three-bedroom unit paid about \$185, or 24 percent, more for monthly rent and utilities than covered by the member's housing allowance.
	To significantly reduce or eliminate the out-of-pocket costs at these sites, the Navy implemented a new program in October 1999. Using one of the authorities provided in the current privatization initiative, differential lease payments, the Navy modified the existing limited partnership agreements and began paying a portion of each member's monthly rent directly to the developer. The idea is that the Navy will pay a portion of a member's rent so that the member's housing allowance is sufficient to pay the balance of the rental amount plus expected utilities. The Navy estimated that over the remaining term of the agreements at Corpus Christi, Kingsville, and Everett the differential lease payments will cost about \$8.2 million. Local officials

⁶Paygrade E-5 is a petty officer second class in the Navy or a sergeant in the Army.

	Chapter 2 Privatization Progress Is Slow and Unanswered Questions Remain
	at the sites stated that while the differential lease program will help military families living in the privatized units, other military families living in nearby civilian housing could experience some resentment because their out-of- pocket costs are not covered by the program.
	In regards to whether the developers were meeting expectations for managing the projects, Navy officials at the three sites stated that the developers were operating the units in a satisfactory manner. However, according to local Navy housing officials in August 1999, a survey of residents at the Corpus Christi units indicated that on-site maintenance fell short of an acceptable rating. At Everett, officials stated that, although the project was operating well and most residents were pleased to be living in the project, residents had complained that maintenance requests were responded to more slowly than expected and that the quality of maintenance work was lower than expected.
DOD Has Not Developed an Evaluation Plan for the Initiative	Despite the fact that the initiative is 4 years old, DOD has not developed an evaluation plan to ensure consistent measurement of the progress and effectiveness of the initiative from project identification through the end of each privatization contract. As a result, it has no means to systematically compare the cost and implementation time frames of privatized projects to traditional military construction projects, assess the advantages and disadvantages of the various authorities, or measure servicemembers' satisfaction with the privatized housing and contractor performance. Timely, complete, accurate, useful, and consistent performance data could help decision-makers evaluate the overall effectiveness of the initiative, determine whether the initiative is meeting program goals, address questions and concerns, and identify what modifications might be needed as the program is implemented over the next several years.
	To date, DOD's assessment of the initiative has focused on establishing the framework for implementing the program, measuring the number of projects and housing units planned or approved for privatization, and ensuring that approved projects leverage government funds in constructing or renovating military housing. The services, however, have individually begun developing approaches to measure performance of projects after construction is completed and military families have moved in. For example, the Army plans to collect and measure data on (1) contractor response times to maintenance requests, (2) time required for a contractor to prepare a vacated unit for the next occupant, (3) contractor completion of recurring maintenance needs against established schedules,

	(4) contractor payment of mortgages and other financial requirements in accordance with schedules, and (5) satisfaction of military occupants with the housing. But, without an overall DOD evaluation plan as a guide, the services' might not consistently collect the performance information needed for an overall assessment of the initiative.
Conclusions	Because no projects under the initiative have been fully implemented, there is little basis to evaluate whether the initiative will ultimately achieve its goals of eliminating inadequate housing more economically and faster than could be achieved through traditional military construction financing. Also, despite the fact that this pilot program is 4 years old, DOD has not developed an overall evaluation plan to assess the initiative's merits. Without an evaluation plan, DOD has no means to systematically compare the actual cost and implementation time frames of privatized projects to traditional military construction projects, assess the advantages and disadvantages of the various authorities, measure contractor performance, or assess servicemembers' satisfaction with the privatized housing.
Recommendation	To help evaluate the overall effectiveness of the Military Housing Privatization Initiative, we recommend that the Secretary of Defense direct the Competitive Sourcing and Privatization Office to develop a privatization evaluation plan. The plan, which should be used by all services to ensure consistency, should include performance measures to help officials determine whether the initiative is meeting goals and whether modifications to the initiative are needed. The plan should also provide a means to evaluate the merits of the individual authorities, compare the actual and estimated costs of each project, assess key aspects of developer performance, collect statistics on the use of the housing, and assess servicemembers' satisfaction with the housing.
Agency Comments and Our Evaluation	DOD agreed with our recommendation and stated that it had already taken steps to implement the recommendation. DOD stated that it had initiated a plan to establish peer review and audit mechanisms to evaluate privatization projects across the services to capture best practices. DOD also stated that the peer review process will be used to develop a formal evaluation plan and that the draft of this plan is scheduled for review by the services in late summer 2000. We believe that these steps can help measure

the overall effectiveness of the program as it is implemented over the next several years.

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Life-Cycle Cost Analyses Lack Consistency and Reliability and Indicate Modest Potential Savings

	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, while other analyses excluded the value of government property transferred to the private contractor. In addition, these comparisons show that the estimated savings from privatization would be modest, averaging about 12 percent. After making appropriate adjustments to the analyses, we calculated privatization savings to be about 11 percent.
	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. However, DOD has not issued formal guidance for the services to use in preparing the analyses, nor has it developed definitive guidance for when more costly privatization projects should be approved over military construction projects.
The Services' Life- Cycle Cost Analyses Lack Consistency and Reliability	In our comparison of DOD's draft guidance for performing life-cycle cost analyses with the services' analyses for the 2 privatization projects awarded or the 12 projects approved for solicitation, we found inconsistencies, inaccuracies, or a lack of support for some assumptions and estimates in every completed analysis. For example, (1) seven analyses did not consider costs for project planning and design, (2) three analyses did not consider the value of government property conveyed to the developers, (3) two analyses included the value of conveyed property but did not provide supporting documentation for the estimates used, (4) six analyses did not include costs for monitoring the privatization contract, (5) two analyses did not use the correct Office of Management and Budget discount rate to adjust for the time value of money, and (6) no analyses were performed for two projects.
	Pendleton, for example, the Marine Corps compared estimates of the government's long-term costs for the project financed through the initiative

Chapter 3 Life-Cycle Cost Analyses Lack Consistency and Reliability and Indicate Modest Potential Savings

	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.
Projects With No Life-Cycle Cost Analysis	The Army did not prepare a life-cycle cost analysis for the proposed privatization project at Fort Hood because it had adopted a new approach to developing privatization projects. Under this approach, rather than defining the scope of a proposed project and then selecting a developer to implement the project, the Army will first select a developer who will help define the scope and plan the project at the installation. Thus, although an installation has been approved to plan a privatization project, the Army is unable to perform a life-cycle cost analysis until a developer is selected and the project's scope is defined.
	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

	Chapter 3 Life-Cycle Cost Analyses Lack Consistency and Reliability and Indicate Modest Potential Savings
	to officials in the DOD office responsible for the initiative, a life-cycle cost
	analysis should have been prepared for this project.
Overall Projected Savings Are Modest	Our review of the 12 life-cycle cost analyses for the 2 awarded projects and the 10 remaining projects approved for solicitation 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, we found that privatization, on average, should cost the government about 11 percent less than military construction financing (see table 3). For 10 projects, the estimated savings ranged from 38 percent to 5 percent. For two projects, Robins Air Force Base and Stewart Army Subpost, we estimated that privatization would cost more than military construction—about 9 percent and about 15 percent more, respectively. ¹ 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. Appendix IV provides more details comparing the results from the services' life-cycle cost analyses with our estimates.

¹The Robins privatization proposal calls for an on-base elementary school operated by DOD to close when the project is awarded. In comparing the proposal's life-cycle costs with the military construction option, the Air Force considered two alternatives. The first military construction alternative assumed that, similar to the privatization proposal, the on-base school would close. The estimated military construction life-cycle costs for this alternative are less than the estimated privatization life-cycle costs. The second military construction alternative assumed that the school would remain open over the life of the project. Because of the costs to operate the school, the estimated military construction life-cycle costs for this alternative are significantly higher than the estimated privatization life-cycle costs.

Table 3: Comparison of Life-Cycle Cost Estimates for 12 Projects

Dollars in millions					
			Estimated savings		
	Military construction option	Privatization option	Dollars	Percentage	
Services' estimate					
Total cost	\$3,128	\$2,755	\$373	11.9	
Average project cost	\$261	\$230	\$31	11.9	
Our estimate					
Total cost	\$3,297	\$2,937	\$360	10.9	
Average project cost	\$275	\$245	\$30	10.9	

Note: Includes the awarded projects at Fort Carson and Lackland and the 10 remaining projects approved for solicitation that had a life-cycle cost analysis prepared by the services.

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. In particular, DOD's newly announced initiative to significantly increase housing allowances could increase privatization life-cycle costs for awarded contracts and for future projects because servicemembers use their allowances to pay for rent and utilities in privatized housing. If the initiative is fully implemented, several of the currently planned privatization projects with estimated savings could possibly cost the government more than if the projects were paid for with military construction funds.

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. For example, the Army's February 1999 housing budget submission for fiscal year 2000 stated that analyses show privatizing Army family housing will not save money. Chapter 3 Life-Cycle Cost Analyses Lack Consistency and Reliability and Indicate Modest Potential Savings

DOD Had Not Issued Final Guidance for Life-Cycle Cost Analyses	DOD had not issued final guidance for the services to use in their life-cycle cost analyses. 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 servicemembers 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 servicemember referral services and for oversight of the contracts, which in many cases is for 50 years.
	these analyses and DOD agreed that this was necessary for consistent comparisons, DOD had only developed draft guidance by October 1999, and use of this guidance was not mandatory. DOD officials stated they planned to issue final guidance in February 2000.
	DOD's draft guidance 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.

Chapter 3 Life-Cycle Cost Analyses Lack Consistency and Reliability and Indicate Modest Potential Savings

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.² 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.

Conclusions

Overall long-term projected savings from privatization are modest, and if DOD fully implements the new housing allowance initiative, these savings could be even less. 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.

Recommendation

To increase the reliability and consistency of life-cycle cost analyses and to provide specific criteria for approving privatization projects, we recommend that the Secretary of Defense (1) refine the draft guidance on preparing life-cycle cost analyses to clearly specify what costs should be included in the analyses and to better explain how the services should estimate each type of cost and (2) develop definitive guidance for approving a privatization project when the project's estimated total costs exceed the costs to implement the project with military construction funds.

²To consider the time value of money, DOD's life-cycle cost analyses estimate all costs in present value terms which estimate future costs in current dollars.

Chapter 3 Life-Cycle Cost Analyses Lack Consistency and Reliability and Indicate Modest Potential Savings

Agency Comments and Our Evaluation	DOD agreed with our recommendation, stating that it should refine the guidance for life-cycle cost analyses. DOD stated that it intends to issue refined guidance, incorporating our recommendations, that will require the services to examine the privatization and military construction alternatives and their associated costs in a uniform and comprehensive manner. DOD expects to have the revised guidance completed and ready for coordination with the services in late spring 2000. We believe these are positive steps to help ensure that approval decisions for proposed privatization projects are made in a manner that consistently determines what is in the government's best interest.
	DOD commented that we inaccurately assumed that, if DOD's proposed initiative to increase housing allowances by about 19 percent over a 5-year period is fully implemented, privatization savings will be less than currently estimated. According to DOD, for projects not yet awarded, it would add mechanisms, such as reinvestment requirements, revenue-sharing accounts or increased land rent, to ensure that life-cycle costs are not increased when allowances are increased. While this may be true for future projects, it should be noted that, for the projects already awarded, any increase in housing allowances will increase costs since rents are determined on the basis of the allowances. In addition, for new projects, DOD cannot be assured that contractors would accept new mechanisms that would limit government costs. If they do not, the costs of privatized housing would increase. We have modified our report to show the uncertainty of the impact of the allowance initiative on the cost of privatized projects. Aside from the relative costs of privatization and military construction, the real significance of the housing allowance initiative is that it should make more housing affordable to military families in some local communities, thereby reducing the need for government-supplied housing, regardless of the source of funding.

	The privatization initiative is only one of several options, including housing allowances and traditional military construction, available to meet the housing needs of servicemembers and their families. To be most effective, the initiative needs to be integrated with the other elements of an overall housing strategy. Although DOD has made progress in coordinating the initiative with other housing options, it has not developed a plan showing how the various options will be used to meet DOD's housing needs in an optimum manner. Development of a coordinated housing strategy is even more important in view of the potential impacts from DOD's new initiative to increase housing allowances. Also, the services have not improved their housing requirements determination processes to more accurately estimate how much housing the installations must supply, and they have not always updated their housing requirements assessments prior to approving privatization projects. As a result, the services cannot be assured that they are constructing, replacing, or revitalizing housing only at installations where the need for additional housing is adequately documented.
Required Integrated Housing Strategy Has Not Been Developed	In the July 1998 Conference Report discussed previously, the conferees expressed concern that DOD was not fully coordinating the various options for addressing housing needs. As a result, the conferees directed DOD to report to the House and Senate Committees on Appropriations by December 1, 1998, on an integrated family housing strategy, including a detailed plan for integrating the DOD offices that have responsibilities for the military's family housing program. The conferees' direction also stated that this strategy should focus on the maximum use of existing civilian housing, the use of enhanced housing referral services, coordination of housing allowances, and the appropriate use of privatization and traditional construction options.
	At the time of our review in January 2000, DOD had not completed the requested report. DOD officials stated that the delay was caused by a lack of staff and that the report should be issued soon. However, DOD officials stated that DOD has improved the mechanisms that are used to ensure that housing decisions are well-coordinated. For example, DOD has increased use of the Installations Policy Board, which reviews and coordinates policies and issues affecting DOD installations, such as military housing. The membership of this board includes management officials from the DOD offices responsible for housing and for housing allowances. In addition, DOD formed the Military Family Housing Policy Panel, which meets regularly to review and coordinate military housing matters at the staff working level. Officials in each of the services stated that coordination

	Chapter 4 Continued Efforts Needed to Integrate Privatization With Other Housing Options		
	has improved among the various offices responsible for housing, housing allowances, and member quality-of-life issues.		
	Because of the interdependency of military family housing, privatization, and housing allowances, the continued coordination of these options is important. DOD and the Congress have made efforts to reduce average out of-pocket costs for members and their families, and in January 2000, DOD announced plans to eliminate out-of-pocket costs through significant allowance increases over the next 5 years. Increases in housing allowances make civilian housing more affordable, and therefore, may reduce the demand for on-base housing. Also, the rental fees for most privatized housing are established on the basis of the servicemembers' housing allowances. Thus, significant increases in housing allowances could result in significant increases in rental payments to a developer, creating the potential for larger than expected profits. Conversely, any significant decreases in housing allowances—although unlikely with implementation of DOD's new initiative to significantly increase allowances—could have the effect of developers' cutting corners on operations and maintenance of privatized housing to save money. These relationships make coordination essential for an effective housing program.		
	Marine Corps officials provided an example of the challenges posed in coordinating the various housing programs. They explained that prior to the public release of the military housing allowance rates for 1999, they had no knowledge that the rates would be decreasing at the Marine Corps installation at Twenty-nine Palms, California, where a major privatization project was planned. When the new rates were announced, the Marine Corps decided to cancel the project because the decreased rates made the project financially infeasible.		
Slow Progress in Improving Housing	Fundamental to an integrated housing plan is a process that accurately determines the services' housing needs and the local communities' ability		

Improving Housing Requirements Determinations Fundamental to an integrated housing plan is a process that accurately determines the services' housing needs and the local communities' ability to meet those needs at each installation. Accurate requirements analyses can help ensure that government housing, whether privatized or not, is provided only at installations where the local communities cannot meet the military's family housing needs, as specified by DOD policy. However, our prior work and the work of others have found significant, long-standing problems in the processes the services use to determine military housing requirements. DOD has taken steps to address these problems, but progress in implementing improvements has been slow.

To illustrate, a 1992 report by the DOD Inspector General stated that the Navy and the Air Force had overstated family housing requirements and understated the amount of private sector housing available to satisfy requirements for several proposed housing projects. A 1994 report by the Naval Audit Service stated that the Navy had overstated housing requirements at eight installations because the requirements determination process was based on flawed procedures, poor implementation of those procedures, and inaccurate data. In our 1996 report on military family housing, we noted that DOD and the services relied on housing requirements analyses that (1) often underestimated the private sector's ability to meet family housing needs and (2) used methodologies that tended to result in a self-perpetuating requirement for government housing.¹ In response to our recommendation that DOD improve the requirements process, DOD stated that it intended to revisit procedures for determining housing requirements.

More recently, an October 1997 DOD Inspector General report stated that "DOD and Congress do not have sufficient assurance that current family housing construction budget submissions address the actual family housing requirements of the Services in a consistent and valid manner."2 The Inspector General recommended development of a DOD standard process and standard procedures to determine family housing requirements. In response, DOD convened a working group, including representatives from each service, in December 1997 to address the problems and develop recommendations for improving the housing requirements determination process. According to a DOD official with responsibility for overseeing the DOD housing policy, the working group made progress, but at a slow pace. Deciding that the job was too big for the working group, in January 1999, DOD contracted with the Center for Naval Analyses to review the current housing requirements models and private sector methods and to recommend a model that would be better than the current models and would be more consistent across the services. This review is scheduled to be completed in calendar year 2000. DOD officials stated that they plan to issue revised policies for determining housing requirements during calendar year 2000 after they examine the review's results.

¹Military Family Housing: Opportunities Exist to Reduce Costs and Mitigate Inequities (GAO/NSIAD-96-203, Sept. 13, 1996).

²DOD Family Housing Requirements Determination, DOD Inspector General Report No. 98-006, Oct. 8, 1997.

Updated Market The DOD Housing Management Manual 4165.63M states a housing market analysis should be performed at installations where acquisition of housing Analyses Not Available is programmed to help determine military housing needs and the ability of for Some Privatization the local communities to meet these needs. The housing market analysis **Projects** should consider housing demand for both military and civilian populations, including the affordability of local housing as well as economic and demographic trends in the market area. Although these analyses are important to accurately estimate and document housing requirements, they have not been specifically required to be updated as part of the approval process for proposed privatization projects. For 5 of the 14 installations with a privatization project awarded or approved for solicitation, we found that no housing market analysis had been prepared within the past 5 years. The Army, for example, had not performed market analyses at Fort Carson and Fort Hood within the past 5 years. Army officials stated that family housing requirements at these installations had been estimated using an econometric model and that the requirements had been verified by the Army Audit Agency. The officials agreed that housing market analyses provide more detailed information on local housing conditions and stated that such analyses will be performed at Fort Hood and other Army installations with planned privatization projects. Also, the Navy's last housing market analysis for Corpus Christi and the Marine Corps' last market analysis for Camp Pendleton were both dated in 1994. Navy and Marine Corps officials stated that updated market analyses for these locations were delayed pending completion of DOD's efforts to improve the housing requirements determination process. The Marine Corps also had not performed a housing market analysis for its planned privatization project at Stewart, New York, or at the recently withdrawn project at Chicopee, Massachusetts. At each location, the basis of the housing requirement was an informal survey of all servicemembers stationed or assigned within a 1-hour commute of each location. In June 1999, DOD had notified the Congress of its intent to begin the solicitation process for privatizing housing units at these locations. However, in October 1999, the Marine Corps placed the Chicopee project on hold pending a reexamination of long-term projections of Marines in the Chicopee region. By the end of October, the project was officially withdrawn from consideration for privatization because of the uncertainty

over the housing requirement.

At some proposed privatization locations where housing market analyses had been performed within the past 5 years, the analyses included information that raised questions concerning the need for on-base family housing. For example, the November 1996 market analysis for the Marine Corps Logistics Base, Albany, Georgia, showed that the local community had 2,149 suitable rental units that were vacant. However, the analysis assumed that only two of these vacant units were available to Marine families because the methodology used to determine requirements assumed that only a small portion of available civilian housing would be available to military families. Specifically, because the total Marine family housing requirement represented only 0.1 percent of the total suitable rental units in the local community, the market analysis assumed that only 0.1 percent of the suitable rental vacancies would be available to Marine families.

Maximizing Use of Housing in Local Communities Is Least Costly but Difficult to Implement Implementation of DOD's policy of relying first on existing housing in the local communities to meet military family housing needs is important to contain costs. According to our estimates in 1996, total annual costs to the government were about \$5,000 less for a military family that lived in local community housing instead of government-owned housing because the family typically paid about 19 percent of its housing costs out of pocket and the government paid less in education impact aid because private housing is subject to local taxes.³ The estimates also showed that housing constructed, operated, and maintained by the private sector generally costs less than housing constructed, operated, and maintained by the military. Although the government's cost for families living in private housing would increase if out-of-pocket costs were eliminated, as envisioned in DOD's announced initiative to increase housing allowances, the cost would still be less than providing government-owned housing.

³Education impact aid is paid to local governments to help cover the cost of educating dependents of military members. The impact aid for each dependent is significantly higher for students that live with their families in government housing because such housing is not subject to local property taxes. When military families live in housing in the local communities, a much smaller amount is paid for each student because the housing is subject to local property taxes.

Most military families in the United States receive a housing allowance and live off base, consistent with DOD policy. A recent Rand study stated that most members would prefer to live off base in the civilian communities if out-of-pocket costs were not too great.⁴ However, military members frequently have incurred significant out-of-pocket costs to live off base or accepted housing that the military does not consider suitable. As a result, many members have sought to live in government housing where all costs are covered. Other factors, such as being close to work, on-base amenities, or a preference to live close to other military families, may have contributed to some members seeking on-base housing; but the primary reason, according to the Rand study, is the economic benefit. It is for this reason that many installations have had high demand, including a waiting list, for on-base housing, even though much of the housing was considered inadequate.

Recognizing the economic benefit that members receive when living on base, the services have generally viewed any decrease in the number of onbase housing units as a cut in military benefits since the result would be more members paying out-of-pocket costs. Thus, counter to the DOD policy of relying on local communities as the primary source of housing, the services have often resisted reducing on-base inventory, even when adequate civilian housing was available. At some locations, rather than divest of inadequate on-base housing by increasing reliance on civilian housing, the services planned to maintain current on-base housing inventories by revitalizing or replacing inadequate housing through military construction funding or through privatization implemented with no out-ofpocket costs.⁵

If fully implemented over the next 5 years, DOD's new initiative to eliminate out-of-pocket costs will respond to this issue and should make private housing more affordable. However, perhaps best illustrating the present situation is the Air Force's recent effort to develop a family housing master plan. Published in August 1999, prior to the announcement of DOD's new initiative, the master plan provides a road map for how the Air Force plans to address its housing needs through military construction, privatization, and operation and maintenance funding. The plan clearly

⁴An Evaluation of Housing Options for Military Families (RAND, 1999).

⁵DOD policy issued in September 1998 stated that privatization projects should be designed so that the members' housing allowances will fully cover the costs of rent and utilities, thus resulting in no out-of-pocket costs for members living in privatized housing.

recognizes the conflict between maximum reliance on civilian housing and the desire to limit the number of members paying out-of-pocket costs for housing.

Air Force guidance for preparing the master plan stated that on-base housing requirements will be determined by using "the Air Force interpretation" of DOD's housing policy of relying on local communities for housing. The Air Force interpretation is to maximize reliance on local community housing "consistent with the needs of the mission and military families." According to the Air Force, mission and family needs include keeping a viable on-base housing community and considering the military family demand for on-base housing when assessing housing needs. With this view, even at installations where the local communities could house more military families, the Air Force plans to retain on-base housing inventories, providing there is a high demand for the units—defined as occupancy of 98 percent or greater over the previous 3 years. The master plan states that "the Air Force does not intend to solve it's housing problem 'on the backs of the troops'. As long as there is an economic disparity between on- and off-base [housing costs], the Air Force will retain and maintain on-base housing where troops are 'voting' with their 'demand'".

Air Force housing officials stated that the analyses performed in completing the master plan showed that many Air Force installations could rely more on local community housing. However, because the demand for on-base housing was also high at most of these installations, the Air Force did not consider all of these installations to have surplus on-base housing. DOD housing officials agreed that the Air Force's interpretation of DOD's guidance on reliance on community housing appeared different and stated this interpretation would be examined in the requirements determination review being performed by the Center for Naval Analyses.

Conclusions

DOD has yet to develop an approach to solve its housing problem in a manner that optimally integrates housing allowances, traditional military construction, and privatization. An integrated strategy that recognizes the interdependency of these elements has become even more essential because of the potential significant impacts of DOD's new housing allowance initiative on privatization, military construction, and the need for on-base housing. DOD officials state that such a plan is under development and will be completed this year. However, additional steps are needed to better ensure that privatization, or military construction, is used to construct or revitalize housing only at installations where the need is

	Chapter 4 Continued Efforts Needed to Integrate Privatization With Other Housing Options
	adequately documented. One step is for DOD to follow through with plans to issue revised policies during calendar year 2000 to improve the methods used to estimate housing needs and the ability of local communities to meet these needs. Further steps include requiring updated housing requirements assessments as part of the approval process for proposed privatization projects and addressing questions regarding the services' application of DOD's policy of relying on private sector housing.
Recommendations	As part of the development of the DOD integrated housing strategy and in view of the potential impacts from the new housing allowance initiative, we recommend that the Secretary of Defense (1) require that housing requirements assessments be updated as part of the approval process for proposed privatization projects and (2) clarify DOD's policy that requires primary reliance on private sector housing to specifically delineate the circumstances under which privatization or military construction projects are permissible when alternative housing is available in local communities.
Agency Comments and Our Evaluation	DOD agreed with our recommendations, acknowledging the need for greater consistency among the services in validating housing requirements. DOD stated that it is working to achieve coordination and consistency in its housing programs through use of ongoing studies and several senior-level working groups. Also, understanding that the allowance initiative will affect military housing requirements, DOD stated that it is establishing a senior-level, joint Housing Policy Panel to provide policy for determining housing requirements and to establish clear policy for meeting those requirements. We believe that these steps can improve DOD's internal coordination on housing matters and enhance DOD's efforts to effectively integrate housing options. Establishing clear policy on use of private sector housing and on circumstances that justify use of military housing is important to minimizing government housing costs whether privatized or not.

GAO/NSIAD-00-71 Military Housing

Summary of 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 servicemembers, 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)

Appendix I Summary of Authorities in the Military Housing Privatization Initiative

- 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 servicemembers to housing units acquired or constructed under the initiative. (10 U.S.C. 2882)
- Lease payments through pay allotments: DOD may require servicemembers who lease housing acquired or constructed under the initiative to make lease payments by allotment from their pay. (10 U.S.C. 2882©)

Appendix II

DOD's Military Housing Privatization Program as of October 1999

Service	Project	Number of units ^a	Current status	Estimated contract award date
Army	Fort Carson ^b	2,663	Awarded	September 1999
	Fort Hood	6,631°	Approved for solicitation	September 2000
•	Fort Meade	3,170°	In planning	April 2001
	Fort Lewis	4,348°	In planning	December 2000
Air Force	Lackland	420	Awarded	August 1998
	Dyess	402	Approved for solicitation	July 2000
······	Elmendorf	828	Approved for solicitation	March 2000
к Р	Robins	670	Approved for solicitation	April 2000
	Kirtland	1,890	In planning	November 2000
	Patrick	960	In planning	July 2000
	Dover	450	In planning	January 2001
	McGuire/Ft Dix	999	In planning	February 2001
	Tinker	730	In planning	December 2000
lavy	Everett II	300	Approved for solicitation	March 2000
	Kingsville II	150	Approved for solicitation	February 2000
	San Diego	3,248	Approved for solicitation	August 2000
	South Texas	812	Approved for solicitation	September 2000
	New Orleans	613	Approved for solicitation	October 2000
larines	Pendleton	712	Approved for solicitation	April 2000
	Albany	114	Approved for solicitation	February 2000
	Stewart	200	Approved for solicitation	January 2001
	Beaufort/Parris Island	684	In planning	February 2001
otal units	-	30,994		

^aTotal estimated units at project award.

^bArmy officials estimated that 4 to 5 years will be required before planned construction and renovation is completed.

^cMaximum possible units—actual number not yet determined.

^dConstruction is scheduled to be completed in February 2001.

Source: Competitive Sourcing and Privatization Office, DOD.

	Public Law 103-337, enacted October 5, 1994, included provisions that gave the Navy authority to test the use of limited partnerships with the private sector to develop family housing for Navy servicemembers and their families. The Navy initiated two limited partnership agreements using this earlier authority to help meet family housing shortages for enlisted servicemembers in the Corpus Christi and Kingsville, Texas and the Everett, Washington, areas.
Housing at Corpus Christi and Kingsville, Texas	In South Texas, the Navy entered into a limited partnership agreement in July 1996 with a private developer to build and operate 404 family housing units at two locations. The units, all completed and ready for occupancy by November 1997, were built off base using commercial building standards and practices. The Navy contributed \$9.5 million to the project, and the developer financed the balance of the project's \$32 million total cost. In return for its contribution, occupancy preferences were given to Navy families, and rents were targeted to be affordable on the basis of enlisted paygrade E-5 housing allowances. When a vacancy occurs, the developer gives the Navy 45 days to find a military tenant. If a Navy family does not rent the vacant unit, the developer can offer the unit to civilians. Each tenant, military or civilian, was initially responsible for paying utilities. The limited partnership agreement lasts 10 years, with a 5-year option period. At the end of the partnership, the units will be sold. The agreement calls for the developer to repay the Navy its initial equity contribution, plus one-third of the net sale proceeds. The units include two-, three-, and four-bedroom townhouse units. Each unit includes a range, a refrigerator, a dishwasher, a microwave oven, washer and dryer connections, and a carport. The two-bedroom unit has about 1,030 gross square feet and two baths, the three-bedroom unit has about 1,207 gross square feet and two baths, and the four-bedroom unit has about 1,355 gross square feet and two baths.
	To serve the Corpus Christi Naval Air Station and the Ingleside Naval Station, 302 units were constructed near Portland, a community about 22 miles from the Naval Air Station and about 16 miles from the Naval Station. The partnership agreement established the initial rental rates for the units and stated that the rates could be adjusted annually on the basis of the percentage change in a specified housing cost index. The 1999 monthly rents at Portland for a two-bedroom, three-bedroom, and four- bedroom unit are \$625, \$690, and \$835, respectively. Local Navy housing

officials estimated that average monthly utilities for a two-, three- and fourbedroom unit were \$107, \$127, and \$142, respectively. Thus, total estimated monthly costs were \$732, \$817, and \$977 for a two-bedroom, threebedroom, and four-bedroom unit, respectively.

The 1999 monthly housing allowance for a paygrade E-5 member at Corpus Christi was \$626. Thus, a paygrade E-5 servicemember that rented a twobedroom unit at Portland paid \$106, or about 17 percent, more than the member's housing allowance. In comparison, a paygrade E-4 member renting a two-bedroom unit paid \$177, or about 32 percent, more than the allowance for an E-4 member, and a paygrade E-6 member paid \$34, or about 5 percent, more than the allowance for an E-6 member. On average, throughout the United States, military members living in civilian housing pay about 19 percent more for their housing than their allowances.

Table 4 provides more details on out-of-pocket costs at Portland from January through September 1999.

				Out-of-pocket	costs*		
		Paygrade E	-4	Paygrade E-	5	Paygrade E-	6
Unit type	Rent plus estimated utilities	Amount	Percent	Amount	Percent	Amount	Percent
2 bedroom	\$732	\$177	32	\$106	17	\$34	5
3 bedroom	\$817	\$262	47	\$191	31	\$119	17
4 bedroom	\$977	\$422	76	\$351	56	\$279	40

Table 4: Out-of-pocket Costs at Portland from January through September 1999

^aOut-of-pocket costs represent the difference between rent plus estimated utilities and the member's housing allowance.

Source: Service housing officials at Corpus Christi Naval Air Station.

Because of concern over the amount of out-of-pocket costs members were paying at the privatized units, the Navy implemented a new program in October 1999 to significantly reduce or eliminate these costs. Using one of the authorities provided in the current privatization legislation, differential lease payments, the Navy modified the existing limited partnership agreement and began paying a portion of each member's monthly rent directly to the developer. The idea is that the Navy will pay a portion of a member's rent so that the member's housing allowance is sufficient to pay

the balance of the rental amount plus expected utilities. With the differential lease payments, most members will have no out-of-pocket housing costs—similar to living in government housing. The Navy estimated that over the remaining term of the partnership agreements at Portland and Kingsville, Texas, the differential lease payments will cost about \$6.1 million.

At the time of our visit in August 1999, all of the units were occupied. Of the 302 units, 222 units were occupied by the military, 76 units were occupied by civilians, and 4 units were occupied by property management. (See table 5.) Under terms of the agreement, property management officials stated that civilian occupants are not required to vacate the units at the end of their leases, even if military families are on a waiting list for the units.

Occupant category	Number of units	Percent
Enlisted E-5 and below	107	36
Enlisted E-6 and above	90	30
Officer	25	8
Civilian	76	[·] 25
Property Management	4	1
Total	302	100

Source: Service housing officials at Corpus Christi Naval Air Station.

To serve the Kingsville Naval Air Station, 102 two- and three- bedroom units were constructed on private property in Kingsville, a community located about 40 miles from Corpus Christi. The 1999 monthly rent at Kingsville was \$521 for a two-bedroom unit and \$625 for a three-bedroom unit. Local Navy housing officials estimated that average monthly utilities for a two-and three-bedroom was \$78 and \$114, respectively. Thus, total estimated monthly costs were \$599 for a two- and \$739 for a three-bedroom unit, respectively.

The 1999 monthly housing allowance for a paygrade E-5 servicemember at Kingsville was \$554. Thus, a paygrade E-5 servicemember that rented a two-bedroom unit at Kingsville paid \$45, or about 8 percent, more than the member's housing allowance. In comparison, a paygrade E-4 member renting a two-bedroom unit paid \$108, or about 22 percent, more than the

allowance for an E-4 member; and a paygrade E-6 member paid \$(23), or about (4) percent, less than the allowance for an E-6 member. Table 6 provides more details on out-of-pocket costs at Kingsville prior to the October 1999 implementation of differential lease payments.

estimated			C	ut-of-pock	et costs ^a	1.000	
	Rent plus estimated utilities	Paygrade E-4		Paygrade E-5		Paygrade E-6	
		Amount	Percent	Amount	Percent	Amount	Percent
2 bedroom	\$599	\$108	22	\$45	8	\$(23)	(4)
3 bedroom	\$739	\$248	51	\$185	33	\$117	19

Table 6: Out-of-pocket Costs at Kingsville from January through September 1999

^aOut-of-pocket costs represent the difference between rent plus estimated utilities and the member's housing allowance.

Source: Service housing officials at Kingsville Naval Air Station.

At the time of our visit to the Kingsville units in August 1999, all of the units were occupied. However, of the 102 units, only 30 units were occupied by military members with families. Forty units were occupied by single servicemembers, 30 units were occupied by civilians, and 2 units were occupied by property management personnel. Also, the majority of the units—55–were occupied by military officers rather than enlisted personnel. Navy officials stated that the project was not serving junior enlisted members and their families to the extent envisioned when the project was developed. Many of the units were occupied by single, junior-level officers, many of whom shared the units with another single, junior-level officers. The partnership agreement did not provide for specific rental preferences for enlisted servicemembers with families, and local housing officials stated that they had not attempted to secure vacancies for enlisted members.

Table 7 provides more details on occupancy at Kingsville in August 1999.

Table 7: Occupancy at Kingsville in August 1999

Category of occupant	Number of units	Percent	
Enlisted family	11	11	
Enlisted single	4	4	
Officer family	19	19	
Officer single	36	35	
Civilian	30	29	
Property Management	2	2	
Total	102	100	

Source: Service housing officials at Kingsville Naval Air Station.

Housing at Everett, Washington

In March 1997, the Navy entered into a 10-year limited partnership with a private developer to build and operate 185 family housing units in the Everett, Washington, area. The housing was intended primarily to serve servicemembers assigned to the Everett Naval Station, located about 18 miles away. The Navy contributed \$5.9 million to the project, and the developer financed the balance of the project's \$19 million total cost.

Beginning in the 6th year, 20 percent of the units will be sold annually. Navy families occupying the units will be given an opportunity to purchase the units. The Navy will share in the net proceeds from the sales, and by the end of the agreement, the Navy will have been repaid its initial equity contribution plus one-third of any additional net sale proceeds. In return for its contribution, occupancy preferences were given to Navy families, and rents were targeted to be affordable on the basis of enlisted paygrade E-5 housing allowances. When a vacancy occurs, the developer gives the Navy 30 days to find a military tenant. If a Navy family does not rent the vacant unit, the developer can offer the unit to civilians. Each tenant, military or civilian, is responsible for paying utilities.

The Everett units were constructed off base using commercial building standards and local practices. Each townhouse unit includes a range, a refrigerator, a dishwasher, a washer, a dryer, and a two-car garage. Excluding the garage, the two-bedroom unit has about 1,160 gross square feet and two baths, the three-bedroom unit has about 1,212 gross square feet and two and a half baths, and the four-bedroom unit has about 1,556 gross square feet and two and a half baths.

The partnership agreement established the initial rental rates for the units and stated that the rates would be adjusted annually on the basis of the percentage change in a specified housing cost index. The 1999 monthly rents for a two-bedroom, three-bedroom, and four-bedroom unit were \$790, \$817, and \$926, respectively. Local Navy housing officials estimated that average monthly utilities for a two-, three-, and four-bedroom unit were \$145, \$128, and \$156, respectively. Thus, total estimated monthly costs were \$935, \$945, and \$1,082 for a two-bedroom, three-bedroom, and fourbedroom unit, respectively.

The 1999 monthly housing allowance for a paygrade E-5 servicemember at Everett was \$760. Thus, a paygrade E-5 servicemember that rents a twobedroom unit paid \$175, or about 23 percent, more than the member's housing allowance. In comparison, a paygrade E-4 servicemember renting a two-bedroom unit paid \$274, or about 42 percent, more than the allowance for an E-4 servicemember; and a paygrade E-6 servicemember paid \$99, or about 12 percent, more than the allowance for an E-6 member. However, similar to the situation at Corpus Christi and Kingsville, the Navy modified the partnership agreement at Everett in October 1999 to provide for differential lease payments. This modification is expected to eliminate most or all out-of-pocket costs for military occupants of these units. The Navy estimated that over the remaining term of the partnership agreement at Everett, the differential lease payments will cost \$2.1 million.

Table 8 provides more details about out-of-pocket costs at Everett prior to the October 1999 implementation of differential lease payments.

	Out-of-pocket costs ^a						
	Rent plus estimated utilities	Paygrade E-4		Paygrade E-5		Paygrade E-6	
Unit type		Amount	Percent	Amount	Percent	Amount	Percent
2 bedroom	\$935	\$274	42	\$175	23	\$99	12
3 bedroom	\$945	\$284	43	\$185	24	\$109	13
4 bedroom	\$1,082	\$421	64	\$322	42	\$246	30

°Out-of-pocket costs represent the difference between rent plus estimated utilities and the member's housing allowance.

Source: Service housing officials at Everett Naval Station.

At the time of our visit to Everett in August 1999, 183 units were occupied by enlisted members and their families, 1 unit was occupied by the on-site project manager, and 1 unit was vacant. (See table 9.)

Table 9: Occupancy at Everett in August 1999

Category of occupant	Number of units	Percent
Enlisted paygrade E-5 and below	103	55
Enlisted paygrade E-6 and above	80	43
Officer	0	0
Civilian	0	0
Property Management	11	1
Vacant	1	1
Total	185	100

Source: Service housing officials at Everett Naval Station.

Local Navy housing officials stated that management attention helps ensure that junior enlisted servicemembers receive preference in renting units at the Everett project. The local housing office maintains separate waiting lists for paygrades E-6 and below and paygrades E-7 and above. When notified of a vacancy, the housing office takes a proactive role in getting an enlisted servicemember to fill the vacancy.

Life-Cycle Cost Comparisons for Privatization Projects Awarded or Approved for Solicitation as of October 1999

This table compares the government's long-term costs for proposed projects financed through privatization and military construction.¹ We completed our analyses prior to DOD's January 2000 announcement of an initiative to significantly increase housing allowances over the next 5 years. If the initiative is implemented as planned, the increased allowances could increase privatization costs for these projects.

Dollars in millions

		Present value of estimated total costs							
			Service estin	nate			Our estimat	te	
Service	Installation	Military construction	Privatization	Difference	Percent	Military construction	Privatization	Difference	Percent
Army	Fort Carson ^a	\$693	\$641	\$52	7.5	\$734	\$685	\$49	6.7
Navy	Kingsville II ^b	\$24	\$18	\$6	25.0	\$24	\$15	\$9	37.5
Navy	Everett II ^c	\$82	\$47	\$35	42.7	\$82	\$52	\$30	36.6
Navy	South Texas⁴	\$245	\$175	\$70	28.6	\$241	\$176	\$65	27.0
Navy	San Diego ^d	\$1,093	\$972	\$121	11.1	\$1,077	\$958	\$119	11.0
Navy	New Orleans ^d	\$173	\$153	\$20	11.6	\$168	\$149	\$19	11.3
Air Force	Lackland ^a	\$119	\$107	\$12	10.1	\$141	\$124	\$17	11.0
Air Force	Elmendorf	\$319	\$287	\$32	10.0	\$360	\$332	\$28	7.8
Air Force	Robins ^e	\$109	\$114	\$(5) ^f	(4.6)	\$112	\$122	\$(10) [†]	(8.9)
Air Force	Dyess	\$75	\$68	\$7	9.3	\$99	\$70	\$29	29.3
Marines	Pendleton	\$166	\$138	\$28	16.9	\$219	\$208	\$11	5.0
Marines	Stewart	\$30	\$35	\$(5) ^f	(16.7)	\$40	\$46	\$(6) [†]	(15.0)
Total		\$3,128	\$2,755	\$373	11.9	\$3,297	\$2,937	\$360	10.9
Average		\$261	\$230	\$31	11.9	\$275	\$245	\$30	10.9

*Because the services' cost estimates for these projects have been revised, the results of the analyses differ from the results shown in our prior report.

^bTotals reflect annual costs for 10 years, the proposed term of the privatization agreement.

"Totals reflect annual costs for 15 years, the proposed term of the privatization agreement.

¹The services did not prepare a life-cycle cost analysis for two projects approved for solicitation—Fort Hood and Marine Corps Logistics Base, Albany.

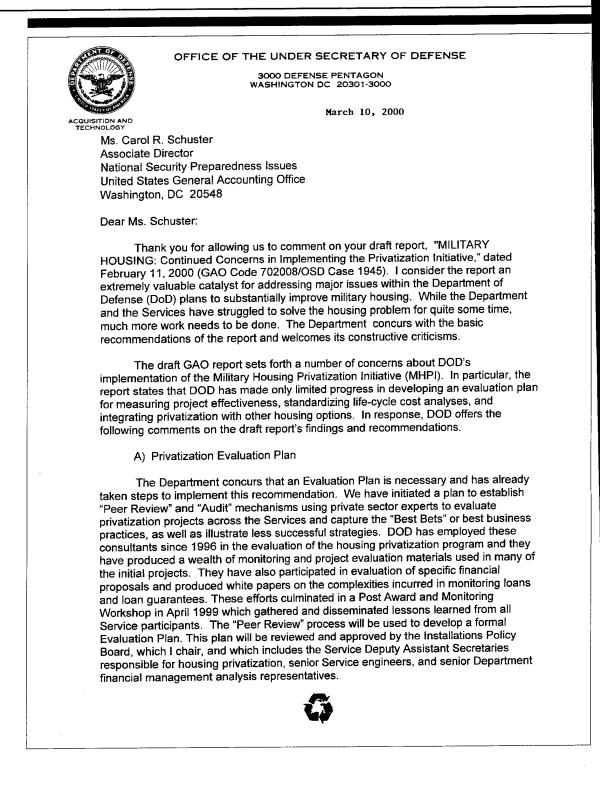
Appendix IV Life-Cycle Cost Comparisons for Privatization Projects Awarded or Approved for Solicitation as of October 1999

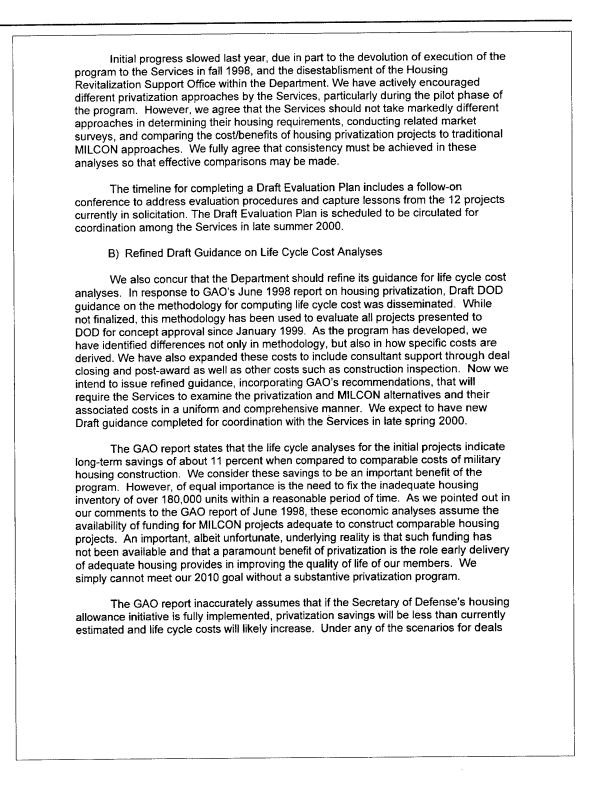
^dAccording to the Navy, in this proposed privatization project, the Navy intends to provide to the developer only a restricted leasehold right to existing military housing units with full reversion to the Navy at the end of the privatization term. Also, the Navy states that the restricted leasehold right will not be provided to an independent private developer, but to a public-private partnership that includes the Navy. Because ownership of the units does not transfer to the developer and because the Navy continues to have some control over the units, the Navy does not place a separate value on this property as part of the cost of privatization in the life-cycle cost analysis. Instead, the Navy considers the value of the property to be equal to the rental fees that can be generated from the units that are occupied by Navy servicemembers and their families over the term of the project.

°See footnote 1 on page 35.

^fMilitary construction alternative costs less than privatization alternative.

Comments From the Department of Defense





	which are not yet awarded, there will be mechanisms such as reinvestment accounts, revenue sharing accounts, or increased rent for leases of government property, which will ensure that the life cycle costs are not increased when allowances are increased. In fact, the increase in allowances should reduce life cycle costs by making projects more financially viable, thereby reducing the need for upfront budget contribution by the government. In addition, greater housing allowances should provide more and better housing units as future projects are developed. For other private sector housing options, concerns remain that since the Department's housing allowance structure is readily transparent, some private sector housing providers will increase rents and negate the impact of increased allowances.
See footnote 1 on p. 35.	Finally, a few clarifications should be made on specific projects mentioned in the GAO report. The report states the privatization project at Robins AFB, GA, would cost more than military construction financing. As footnote 17 indicates, when the on-base elementary school is includedwhich is how the Air Force is executing the projectthe privatization alternative is less expensive. Secondly, the executive summary gives the impression that life cycle analyses were overlooked at Fort Hood and Marine Corps Logistics Base Albany, GA. At Fort Hood, as the community development management plan is developed and the project scope determined, an economic analysis will be performed. While we agree that an economic analysis should have been performed for Albany, the project was started early in the program and no government contribution to the deal was required. Therefore, preparation of the analysis was, incorrectly, not seen as cost-effective.
	C) DOD Integrated Housing Strategy with Greater Consistency in Determinations of Housing Requirements
	The Department concurs that greater consistency is necessary in validating housing requirements for housing privatization projects. While requirements are closely reviewed by DOD prior to concept approval, justification has been accepted by a number of methods ranging from housing market analyses to independent audit reports. The Services have taken different and inconsistent approaches in determining their housing requirements. Part of the issue involves Service beliefs about other important military values being preserved through on-base housing, regardless of whether the private sector is better able to meet the housing needs off base. Some Services also believe that Service members prefer to live on base, to an even greater extent than the recent Rand analysis indicated. Additionally, the use of seniority as a factor in housing assignment tends to exacerbate the housing shortages by reserving on-base housing for more senior Service members, despite the fact that off-base opportunities may be more limited for junior enlisted due to lower housing allowances.
	Increased housing allowances under Secretary Cohen's initiative should reduce on-base housing requirements. Some on-base housing will always be required, however. The Department has begun integration of the MILCON and privatization programs with the housing allowance and housing requirements determination processes. The Department will also need to address current Service housing

assignment and construction standards in a coordinated fashion with these previously stated issues. The methodologies needed to determine these requirements are complex and consensus is not easily reached. We are working hard to achieve consistency in this process, with some of our ongoing studies mentioned in your report. However, private sector standards must also be considered so that the private sector is not forced to build military "unique" houses, incompatible with civilian market standards, thereby increasing costs or increasing risks should guarantees need to be fulfilled. Additionally, the Department has several senior working groups to achieve consistency and coordination in this effort. As stated above, I chair the Installations Policy Board as referenced in the GAO report, which meets every month. Staff working groups support the Installations Policy Board. In addition, the Department is establishing a senior-level joint Housing Policy Panel to provide guidance for determining housing requirements and to establish clear policy for meeting these requirements. Providing safe, adequate housing for Service members is a Department priority. I appreciate GAO's review of our privatization process and its resulting recommendations. While DOD does not fully agree with all factual aspects of the report, we concur with its basic recommendations and understand the concerns expressed. We will continue to move ahead in refining and more fully developing the program as I have outlined above. Thank you for your valuable assistance. Sincerely, Randall A. Yim Deputy Under Secretary (Installations)

Appendix VI

GAO Contacts and Staff Acknowledgments

GAO Contacts	Carol Schuster (202) 512-5140 William Solis (202) 512-8365
Acknowledgments	In addition to those named above, Gary Phillips, James Ellis, and Charles Perdue made key contributions to this report.