

# **MILITARY FAMILIES AND THEIR HOUSING CHOICES**

REPORT HCS80T2

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## Executive Summary

The Office of Secretary of Defense, Housing and Competitive Sourcing, tasked LMI to identify why military families decide to live in the housing they choose and whether they are satisfied with their choice. A key objective was to gain insight into housing-related issues for service members living in the community as well as service members living in military and privatized housing.

We worked with the Defense Manpower Data Center (DMDC) to augment the April 2007 Status of Forces Survey of active duty members with several questions regarding housing choices and satisfaction. Additionally, we increased the sampling at 29 installations that either have significant privatized housing or are in the process of privatizing family housing. We supplemented the survey information with field visits at targeted installations, reviews of private-sector data, and results from other military service surveys. The results we present in this report are focused on family housing and as such are limited to service members who at the time were married (with or without child dependents) or single with child dependents, stationed in the 50 states or the District of Columbia, and assigned to one of the 29 installations serving as the focus of our analysis.

## KEY FINDINGS

We asked respondents to indicate where they were living, where they preferred to live, and how long and far they commuted to the installation. Overall, we found that 22 percent were living in military family housing, 7 percent lived in privatized housing, 32 percent rented in the community, and 38 percent owned housing in the community. When these results were compared to the results of a RAND housing study of 12 installations in 1997, we noted a profound shift from military family and privatized housing to owned housing in the community: 43 percent lived in military family housing and only 27 percent owned homes in the community (no privatization had begun at the time). The average annual increase of 5 to 6 percent in the service member's basic allowance for housing since 2000 was a contributing factor in the shift to homeownership.

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We found that most of the military families are living in their preferred housing choice: 57 percent living in military family housing consider that their first housing choice and 62 percent living in privatized housing regard it as their first choice. Similarly, more than 87 percent of those renting or owning in the community are living in their first choice. Over 90 percent live within a 30-mile, 60-minute commuting radius; 76 percent live within 20 miles, and 75 percent commute 30 minutes or less.

When we requested insight into the type of housing information used when deciding where to live, service members cited for-sale listings, rental advice, and quality of neighborhood or schools the most frequently cited. Print media, private-sector websites, and military housing offices topped the list of sources. Other sources and the Department of Defense's Automated Housing Referral Network (AHRN) website received significantly fewer responses, while the service-specific websites received the fewest responses. However, 67 percent of the service members that used the military sources were satisfied with their usefulness.

Affordability and building equity is the overall most influential decision factor in the housing choice, with approximately 48 percent citing it in their top three priorities. Quality and condition of the residence rank as the second most influential factor, with 46 percent citing it in their top three influencing factors. Security and safety, and quality of the neighborhood round out the top four influencing factors, with 43 and 41 percent, respectively. We found noteworthy that wanting to live in a military community by those who live in privatized or military housing, or wanting to live away from a military community by those who own or rent in the local community, rank fifth overall as an influencing factor.

Respondents were asked to indicate their level of satisfaction with nine housing and community characteristics. For all but one characteristic, those who own their residence reported higher levels of satisfaction than service members living in other housing types. Families reported the highest percentages of satisfaction for safety and security of the area, parking, and quality of the neighborhood (79, 78, and 77 percent, respectively). Affordability had the lowest level of satisfaction (55 percent). Satisfaction with quality and condition of residence (71 percent) and choice of housing options (69 percent) were not in the top four housing attributes.

We found that across all installations in the 50 states and the District of Columbia the median value of rent or mortgage, as a percentage of total household income, was 26 percent. The median cost of rent or mortgage and utilities as a percentage of household income was 29 percent, while the median value for the total of rent or mortgage plus utilities as a percentage of Basic Allowance for Housing (BAH) was 105 percent. Approximately half of all renters pay 3 percent or less out of pocket, while half of owners pay up to 29 percent above their BAH rate for housing expenses.

## KEY RECOMMENDATIONS

Based on the results from this survey, we offer the following recommendations:

- ◆ Promote AHRN as a greater information resource.
- ◆ Review the role and effectiveness of service-specific housing referral websites.
- ◆ Focus on keeping housing options affordable for service members.
- ◆ Encourage occupancy in privatization areas with low occupancy, including encouraging business partners to adjust rental rates to better align with market rent.
- ◆ Closely monitor the significance of commuting time and distances.
- ◆ Investigate ways to improve satisfaction with schools.
- ◆ Monitor trends in satisfaction levels over time.
- ◆ Investigate anomalies in occupancy rates.
- ◆ Develop a separate, focused DMDC housing survey and consolidate all service housing surveys and results.



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# Chapter 1

## Introduction

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The Office of Secretary of Defense (OSD), Housing and Competitive Sourcing, tasked LMI to identify why military families decide to live in the housing they choose and whether they are satisfied with their housing choice.

Uncovering answers to these questions is important because military families now have a wide range of housing choices. Yet, the military services are finding that the demands for government-provided, privatized, and community housing vary considerably, depending on factors ranging from the cost and quality of housing to quality of local schools and commute times.

We were additionally tasked to gain valuable insight into housing-related issues for service members living in the community as well as service members living in military and privatized housing. In a recent study, the Government Accountability Office (GAO) found that while each military service collects and analyzes information about service member's satisfaction with privatized housing, their methods are not consistent and, as such, do not allow for comparison among services. Furthermore, GAO found no consistent method was currently being used to collect similar information for service members living in the community.

Our analysis of survey data and local housing information sheds some light on the factors that are driving service members' housing choices and their levels of satisfaction with those choices. This report presents our key findings regarding service member housing decisions and satisfaction. It also recommends some ways to refine the available housing options, and to enhance future studies of these issues.

## STUDY APPROACH AND SCOPE

The specific purpose of our study was to assess whether military housing programs are providing satisfactory choices for service members and their families. Four such programs are central to this discussion: Basic Allowance for Housing (BAH), privatized housing, government-provided housing (owned or leased by the Department of Defense [DoD]), and the relocation and referral services that help military families choose their housing.

We worked with the Defense Manpower Data Center (DMDC) to augment its April 2007 Status of Forces Survey of active duty members with several questions regarding housing choices and satisfaction. Additionally, to ensure enough responses from families with opportunities to choose privatized housing, we asked DMDC to increase the sample sizes at 29 installations that either have significant privatized housing or are in the process of privatizing family housing. As such,

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the survey data covered all three housing options—government, privatized, and community housing. The DMDC survey database contained weights to adjust for non-response differences among demographic subgroups of active duty personnel to ensure accurate statistical representativeness, and we applied those weights in our analysis. Appendixes A and B contain additional information about the DMDC survey and our approach in analyzing the survey data. We supplemented this survey information with field visits at targeted installations, private-sector data, and other military service survey results (see Appendixes C and D).

The DMDC survey responses presented in this report are limited to service members who at the time of the survey were

- ◆ married (with or without child dependents) or single with child dependents;
- ◆ eligible to respond to the DMDC survey (such as being on active duty, and not incarcerated or retired);
- ◆ stationed in the 50 states or the District of Columbia; and
- ◆ assigned to one of the 29 installations in our analysis.

Our survey focused on service members eligible to live in family housing. As such, we excluded single service members without dependents and geographic bachelor service members from our analysis because they are not typically eligible to live in military family housing or privatized family housing.<sup>1,2</sup> Although we excluded geographic bachelors from our study, we note that geographic bachelors represent 10.3 percent of all service member families stationed in the 50 United States and District of Columbia. Any attempt to explain why service members are geographic bachelors—whether economic or to accommodate family situations—would be speculative because the DMDC survey did not ask any follow-up questions on this issue. However, we believe that 10 percent of the active duty military force in the United States and District of Columbia is a relatively high percentage that warrants further study.

Our analysis of the DMDC survey results showed no significant differences between families at the 29 installations and all other installations. As such, we concluded that the respondents from the 29 installations were sufficiently representative of the entire military population for our purposes. However, even

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<sup>1</sup> Geographic bachelors are service members who have dependents (spouses or children) who choose to live alone at their permanent duty station, i.e., they do not have their dependents living with them. Geographic bachelors are not eligible to live in military family or privatized family housing, and could be living in bachelor's quarters or in community housing, so our housing choice questions did not apply to the housing situation chosen by geographic bachelors.

<sup>2</sup> In situations where there is no waiting list for military privatized family housing, single service members without dependents and geographic bachelors may be permitted to occupy privatized housing units.

with larger samples, the data are valid only in the aggregate and not sufficient to make statistically valid inferences about specific locations or installations.

It is important to recognize that this study attempts to capture a static snapshot of a dynamic and ever-changing housing market.<sup>3</sup> As the next chapter explains, actions by Congress and market forces have steadily altered the housing choices available to service families. These changes—and others that undoubtedly will occur in years to come—provide the context for viewing our findings. Service members may well weigh and evaluate their housing options differently 5 years from now than they do today.

## ORGANIZATION OF THIS REPORT

The remainder of this report consists of five chapters that discuss the following:

- ◆ Housing options available to military families and sources for obtaining housing information
- ◆ How service members decide where to live
- ◆ How satisfied they are with housing
- ◆ How much they are spending on housing
- ◆ Our conclusions and recommendations.

Although this report focuses on our key findings, we also cite certain details that are discussed in more depth in the accompanying appendixes, which reveal significant nuances. For example, they identify notable differences in priorities and satisfaction levels among subgroups such as pay grades and service branches. The appendixes provide additional details on each of the chapter topics.

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<sup>3</sup> The 2007 DMDC Status of Forces Survey was conducted in April 2007 just as the United States housing market housing market was beginning the decline that continued into early 2009.



## Chapter 2

# Housing Options and Information

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This chapter describes the housing options available to service members and the kinds of housing in which DMDC survey respondents live. It also describes the sources and types of housing information that service members consulted before moving.

## THE EVOLVING HOUSING ENVIRONMENT

The housing environment in which a service member makes a housing decision is not the same as it was 10 years ago, or even 5. For one thing, recent congressional initiatives have altered housing options. Historically, 25 to 35 percent of families have resided in government-provided military housing, while most families have met their needs with local community housing. In 1996, however, Congress passed the Military Housing Privatization Initiative (MHPI), in which the military services partner with private-sector firms experienced in financing, building, operating, and maintaining residential properties. These private-sector firms were able to acquire, modernize, and replace housing faster and more efficiently than the military services using traditional military construction. In 1998, DoD privatized fewer than 1,000 housing units; 10 years later, 94 projects have been awarded encompassing more than 188,000 privatized homes. (See Appendix E for a listing of DoD installations with privatized housing.)

Another important factor, between 2001 and 2005 Congress significantly increased BAH<sup>1</sup>—an allowance to cover rent, utilities, and renters insurance—to minimize the differential out-of-pocket expenses that service members typically had to pay for housing when living on the economy (non-military housing) relative to civilians in the same local market. This increase meant that more service members were able to find affordable housing that meets acceptable levels of quality and other criteria, similar to their local civilian counterparts. In other words, the higher BAH rates gave service members far more choices in finding a suitable home.

The fluctuating realities of today's broader real estate market added further complexities. Although housing options have increased, so have the number of buyers. At the same time, mortgages that very recently were all too easy to obtain with subprime loans have nearly evaporated, leaving a chaotic wake of foreclosures, tighter credit, and hesitant developers. The net result is that the housing choices available to military families at the time of the survey were very different

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<sup>1</sup> From the base year period 2000 through 2009, BAH rates increased on average from 5 to 6 percent annually, effectively eliminating out-of-pocket expenses for housing.

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(greater) than they were 10 to 12 years previously. However, with the recent decline in the U.S. real estate market, the housing options and choices for military members will surely change again over the next several years as the housing market recovers.

One other unanticipated development has become a primary decision factor: the price of gasoline. Many military families that previously may have chosen housing in the community must now consider the new burden that the increased price of gasoline, principally in late 2007 and early 2008, has imposed on commuting. This factor could become even more crucial in future years if the price of gasoline continues to increase.

## HOUSING OPTIONS AVAILABLE TO MILITARY FAMILIES

Three types of housing are available to military families: government-provided, privatized, and community.

### Government-Provided Housing

Although DoD policy is to rely on the private sector as the primary source for housing military families, the government has provided various levels of military housing at most installations. In locations where private-sector housing has been found to be inadequate for certain segments of the military population in terms of cost, quality, or commuting distance, the government has provided military family housing as a means to improve quality of life, which is essential to retaining and recruiting service members. Those members who live in military family housing forfeit their BAH and do not pay rent or other housing costs, including utilities (water, sewage, electricity, and gas or heating fuel).

### Privatized Housing

In light of the declining condition of military family housing and difficulty in obtaining sufficient government funding to repair, replace, and build new housing, DoD has transferred many family housing units to the private sector under the MHPI. In this initiative, a private-sector firm owns, manages, and maintains the housing. Initial construction is paid for with a combination of DoD funding (typically military construction funds) and private-sector financing. As of December 31, 2008, privatized units represented about 83 percent of DoD's military housing inventory.<sup>2</sup> One implication of this dominance is that the inventory of government-owned military family housing is shrinking and will generally no longer be an option at most U.S. installations.

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<sup>2</sup> Based on DoD's scorecard report that it sent to the Office of Management and Budget in January 2009.



Service members living in privatized housing receive their BAH, sign a lease, and pay rent (which currently includes utilities) based on the BAH rate.<sup>3</sup>

Table 2-1 presents the pay grades for service members living in privatized housing by service as of January 2010.

*Table 2-1. Percentage of Privatized Occupants by Pay Grade and Military Service*

	E1-E4	E5-E6	E7-E9	W1-W5	O1-O3	O4-O7	O7-O10	Total
Army	35	35	13	3	6	7	1	100
Navy	30	47	12	1	6	4	—	100
Marine Corps	38	38	12	2	6	4	—	100
Air Force	28	41	13	—	9	8	1	100

Note: This information was submitted to Office of the Secretary of Defense, Housing and Competitive Sourcing, by service representatives in January of 2010.

## Community Housing

Service members also have the option of finding housing in the local community. Those who do not live in military family housing are entitled to BAH, the amount of which depends on their pay grade, the location of their duty station, and whether or not they have dependents.<sup>4</sup> The BAH for each duty station is determined by the rental prices of suitable community housing found within commuting distance of the military installation, the average cost of utilities for the local area, and the cost of renters insurance.

## WHERE SERVICE MEMBERS ARE LIVING

We asked DMDC survey respondents to tell us where they were living, where they preferred to live, and how long and far they commuted to the installation. Below we summarize our findings (Appendix F presents more detailed information that distinguishes among pay grades, services, and whether the family has dependent children).

### Types of Housing

In the April 2007 DMDC Status of Forces Survey of active duty members, we asked whether survey respondents were living in military housing (on- and

<sup>3</sup> At most privatized locations, rent includes utilities, but there are plans to eventually require service members to pay for their utilities. When this transition occurs, the rental costs will be adjusted accordingly.

<sup>4</sup> Current BAH rates can be found on the Defense Travel website: [www.defensetravel.dod.mil/perdiem/bah.html](http://www.defensetravel.dod.mil/perdiem/bah.html).

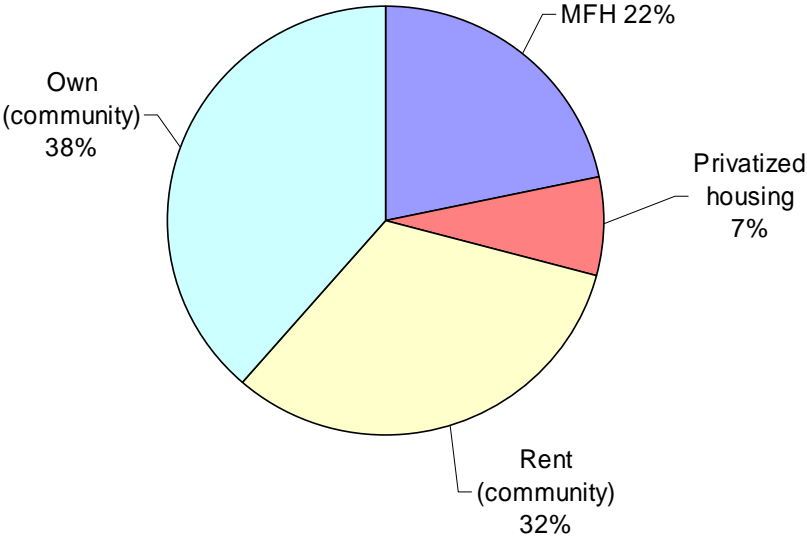
off-base), privatized housing (on- and off-base), rented housing in the local community, or owned housing in the local community.

**2007 DMDC Question 23: Where do you live at your permanent duty station?**

- **Aboard ship**
- **Barracks/dorm/BEQ/UEPH/BOQ/UOPH military**
- **Facility**
- **Military family housing, on base**
- **Military family housing, off base**
- **Privatized military housing that you rent on base**
- **Privatized military housing that you rent off base**
- **Community/civilian housing that you own or pay**
- **Mortgage on**
- **Community/civilian housing that you rent**
- **Other.**

Overall, 22 percent of service member families with permanent duty stations in the United States stated they were living in military family housing, 7 percent lived in privatized housing,<sup>5</sup> 32 percent rented in the community, and 38 percent owned housing in the community. Figure 2-1 shows this distribution.

Figure 2-1. Where Service Members Live



Note: MFH = military family housing.

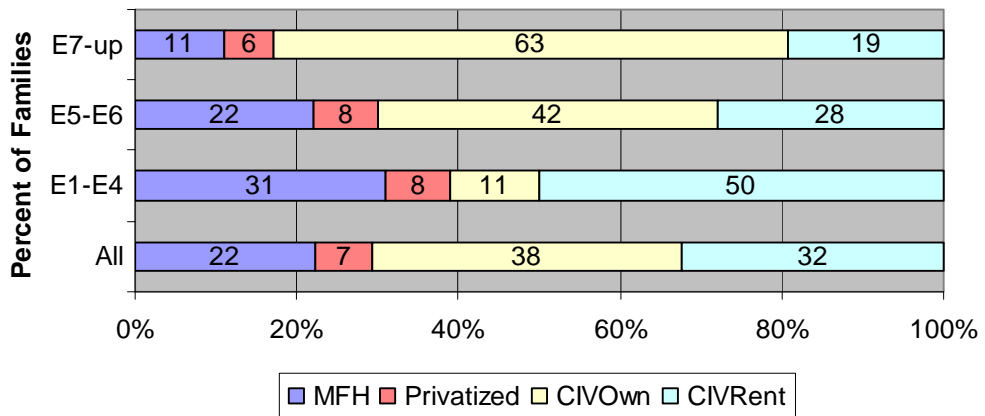
<sup>5</sup> Based on the rapid transformation from government to privatized housing, we expect the next time this survey is conducted that most military family housing will have been transferred to the privatized category. The percentage for privatized military housing should be about 25 percent, while the military housing figure should be less than 5 percent.

Because family housing has been privatized at the vast majority of our 29 focus installations, we were surprised to see 22 percent of respondents indicating they lived in military family housing and only 7 percent reporting they lived in privatized housing. When we compared these results to the RAND housing study of 12 installations in 1997, we found that one-third fewer military families resided in military family housing (combined government and privatized) in 2007 compared to 1997. The RAND study found 43 percent living in military family housing, 30 percent renting in the community, and only 27 percent owning homes in the community (no privatized housing was available at that time).

It appears that military families, like their civilian counterparts, took advantage of historically low mortgage interest rates, an increasing supply of housing, and higher BAH rates with the result that home ownership jumped from 27 to 38 percent in just 12 years. We view this change as positive; many families obviously want to own their own homes. We also note the median occupancy rate for privatized housing in the DMDC-surveyed installations with privatized housing was above 90 percent.

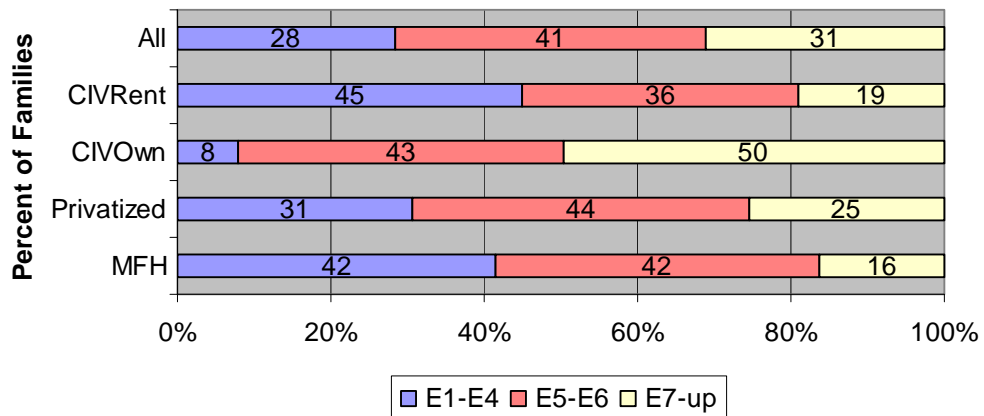
Analyzing the responses by pay grade shows, not surprisingly, that higher pay grades are more likely to own than junior counterparts—63 percent of E7 and above own, compared with 42 percent of E5 and E6, and 11 percent of E1s to E4s. This result is consistent with that from the American Housing Survey, which indicated that only 14 percent of homeowners were younger than 35, while this same age group constituted 41 percent of rented units. Figure 2-2 shows the type of housing where military members live by pay grade.

Figure 2-2. Housing Type by Pay Grade Grouping



When we looked at the data by housing type versus pay grade, we found that 93 percent of all service members who own homes were E5 or above. We also found that the majority of service members who rented civilian housing, lived in military family housing in MFH, or lived in privatized housing, were E6 and below. Figure 2-3 shows the pay grades of military living in each type of housing.

Figure 2-3. Pay Grade by Housing Type Grouping



Additionally, we found that a higher percentage of service members without children lived in rented homes in the local community, compared with those who have children.

## Preferred Choice

In the 2007 DMDC survey, we asked respondents who were not required to live in military housing to identify their first choice of housing type at their permanent duty station.<sup>6</sup>

### 2007 DMDC question 94: Which of the following best describes your first housing choice at your permanent duty location?

- Privatized military housing
- Military housing
- Community housing.

Sixty-eight percent responded by indicating they would prefer to live in community housing. Eighteen percent indicated military family housing as their first choice and 13 percent specified privatized housing as their first choice.

Most service members are living in their preferred housing choice. We also found that 57 percent of service members living in military family housing noted that it was their first housing choice, and 62 percent of service members living in privatized housing regarded privatized housing as their first housing choice. Similarly, more than 87 percent of those renting and owning in the community are living in their first housing choice.

<sup>6</sup> DMDC Question 93 asked respondents at their permanent duty station if they were required to live in military housing (including those assigned to ships or eligible for privatized housing). Seven percent of respondents indicated that they were required to live in military family or privatized housing.

The implication of these findings is that the vast majority of service families are living in the type of housing they find most preferable. The only exception is that about two out of five (43 percent) living in military family housing would prefer to live someplace else. The survey did not ask why the respondents were unable to obtain their preferred housing choice. Table 2-2 compares the preferred housing choice against where survey respondents actually live.

Table 2-2. Preferred Versus Actual Housing Type

Preferred housing choice	Where service members are currently living			
	Military family housing	Privatized	Rent in community	Own
Military family housing	57	17	8	8
Privatized housing	26	62	5	4
Community housing	17	21	87	88

In question 53 of the 2005 DMDC Status of Forces of active duty members survey, service members were asked to rate their choice of housing. Fifty-one percent responded with excellent or very good, 31 percent responded with good, and only 18 percent responded with fair or poor.

Additionally, in both the 2003 and 2005 DMDC surveys, service members were asked the following question: *Suppose when you first arrived at your current duty station that the quality of both on-base and off-base housing you could afford with your housing allowance were the same. Which would you have preferred? Military housing on-base, military operated housing off-base, rent civilian housing, buy civilian housing, or privatized housing on military installation.*<sup>7</sup> Table 2-3 presents the results from both surveys.

Table 2-3. Survey Responses for Preferred Housing Type

Type of housing	2003 survey	2005 survey
Buy civilian housing	31	44
Rent civilian housing	37	29
Military housing on-base	21	18
Military operated housing off-base	8	6
Privatized housing on military installation	3	3

In all three surveys, most service members identified community or civilian housing as their first choice. Additionally, the percentage of service members who indicated privatized housing as their first choice increased significantly in 2007 compared to the earlier surveys. The expansion of the privatized housing program

<sup>7</sup> Question 60 in the 2003 survey and question 59 in the 2005 survey.

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and the contraction of military family housing inventory may be the primary reasons for more service members preferring privatized housing than in previous surveys. Prior to 2003, housing privatization was just getting started with fewer than 25,000 units available at 17 locations. By the end of 2004, approximately 71,000 units had been privatized, but by the end of 2006, more than 130,000 units had been privatized.

## Commute Distances

We also asked how far service members commute to the installation and how long the commute takes them.

### **2007 DMDC Question 90. How far do you commute to work (one-way)?**

- **0 - 20 miles**
- **21 - 30 miles**
- **31 - 50 miles**
- **More than 50 miles.**

### **2007 DMDC Question 91. How long does it typically take you to commute to work (one-way)?**

- **30 minutes or less**
- **31 - 60 minutes**
- **61 - 90 minutes**
- **More than 90 minutes.**

We found that 76 percent of respondents lived within 20 miles of the installation, and 75 percent commuted 30 minutes or less. These are positive findings, especially when combined with the fact that the vast majority of families live in the type of housing they prefer.

## HOUSING INFORMATION

Two questions in the April 2007 DMDC survey asked about the type of housing-related information that service members sought and the sources they used to obtain it.

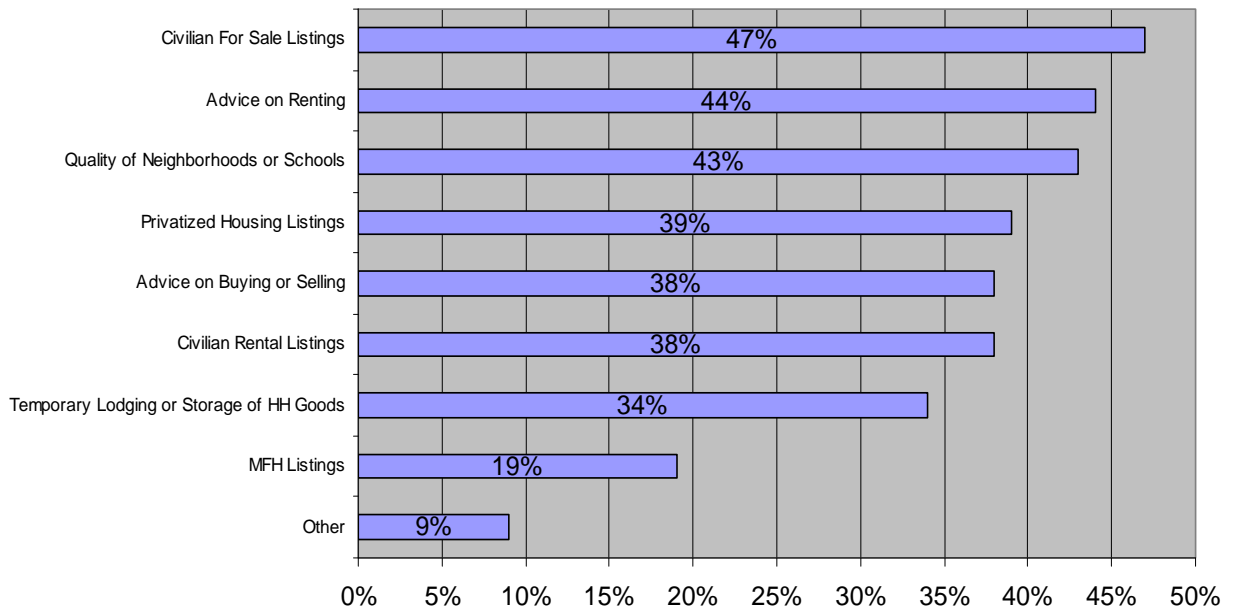
## Types of Information Sought

**2007 DMDC Question 104. Did you obtain any of the following housing information to help you decide where to live at your permanent duty station?**

- Listing of privatized rental units (on or off base)
- Listing of DoD owned units
- Listing of community rental units
- Listing of homes for sale
- Quality of certain neighborhoods or schools
- Advice on renting/leasing (e.g., military clauses, security deposits, Basic Allowance for Housing (BAH) allotment)
- Advice of buying or selling a home (e.g., finding an agent/broker, financing)
- Temporary lodging and/or storage of household goods
- Other.

We asked survey respondents to indicate the type of housing information they obtained when deciding where to live at their permanent duty station. For-sale listings, rental advice, and quality of neighborhood or schools were the most frequently cited. Respondents also consulted listings for privatized housing and civilian rentals, and obtained advice on buying or selling and temporary lodging or storage of household goods. Figure 2-4 shows the breakdown of responses.

Figure 2-4. Types of Housing Information Sought



Note: HH = household.

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These are the types of information one would expect families to seek when making housing decisions, so the results are no surprise. What is more important, however, is whether service families had adequate sources for this information, and whether the information they obtained met their needs. We examine the information sources below, and satisfaction with those sources in a later section.

## Sources of Housing Information

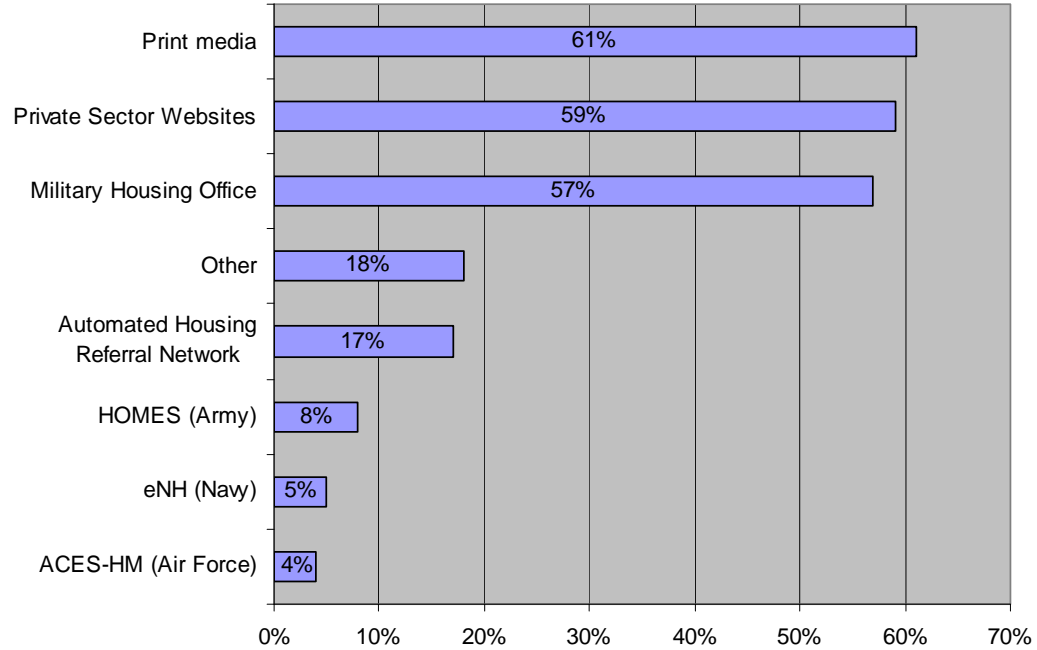
**2007 DMDC Question 105. Did you obtain housing information from any of the following sources?**

- **Military Housing Office - in person, telephone, or e-mail**
- **DoD Web site - Automated Housing Referral Network (AHRN)**
- **Army Web site - Housing Operations Management System (HOMES)**
- **Navy Web site - Electronic Navy Housing (eNH)**
- **Air Force Web site - Automated Civil Engineer System-Housing Module (ACES-HM)**
- **Private sector Web sites (e.g. [militarybyowner.com](http://militarybyowner.com), real estate brokers, [craigslist.com](http://craigslist.com))**
- **Print media (e.g., newspapers, magazines, brochures)**
- **Other.**

If respondents noted they obtained housing information, we asked if they found it in any of the sources shown in Figure 2-5. (Respondents could indicate as many of the sources as were applicable.) Print media (newspapers, magazines, brochures) and private-sector websites ([militarybyowner.com](http://militarybyowner.com), real estate brokers, [craigslist.com](http://craigslist.com)), and military housing offices (in person, telephone, or e-mail) topped the list, with 61, 59, and 57 percent of respondents, respectively. Other sources and DoD's Automated Housing Referral Network (AHRN) website received significantly fewer responses—18 and 17 percent, respectively—while the service-specific websites received the fewest responses. Figure 2-5 presents the percentage of respondents obtaining housing information from the various sources.



Figure 2-5. Sources of Housing Information



**2007 DMDC Question 106. How satisfied were you with the usefulness of the information you received from either the Military Housing Office or a military Web site?**

- **Very satisfied**
- **Somewhat satisfied**
- **Neither satisfied nor dissatisfied**
- **Somewhat dissatisfied**
- **Very dissatisfied.**

Additionally, we asked the respondents who used military sources (such as military housing office, DoD website, or service website) how satisfied they were with the usefulness of the information. Sixty-seven percent noted that they were either very satisfied or satisfied with its usefulness.<sup>8</sup> The implications of these findings are that, while a large majority of those who used the DoD and service websites were satisfied with the information received, only a small percentage of families used the websites.

<sup>8</sup> This information is from the DMDC survey results and includes all survey respondents (families and bachelors in the United States and its territories).



# Chapter 3

## Making the Housing Decision

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In this chapter, we assess the factors that influence housing choices.

In Questions 95 through 100 of the April 2007 DMDC survey, we asked respondents which of the 11 factors listed in Table 3-1 was the most important, second most important, and third most important factor when deciding where to live at their permanent duty station.<sup>1</sup> Note that some selections had different wording for respondents living in the community than for those living in military and privatized housing. The table identifies those differences.

*Table 3-1. Selection List for Factors Influencing the Housing Decision*

Selections for respondents renting or owning in the community	Selections for respondents living in military family housing or privatized housing <sup>a</sup>
Military housing not available	Community housing not available
Affordability or to build equity	Affordability
Quality and condition of the residence	—
Wanting to live away from a military community	Wanting to live in a military community
Proximity to shopping, recreation, and services (e.g., child care, adult education)	—
Time to commute to spouses work place	Time to commute to installation
Quality of schools for your children	—
Quality of neighborhood	—
Security and safety of the area	—
Length of tour at permanent duty station	—
Other	—

<sup>a</sup> No entry indicates that the same selection was used for all respondents regardless of their type of housing.

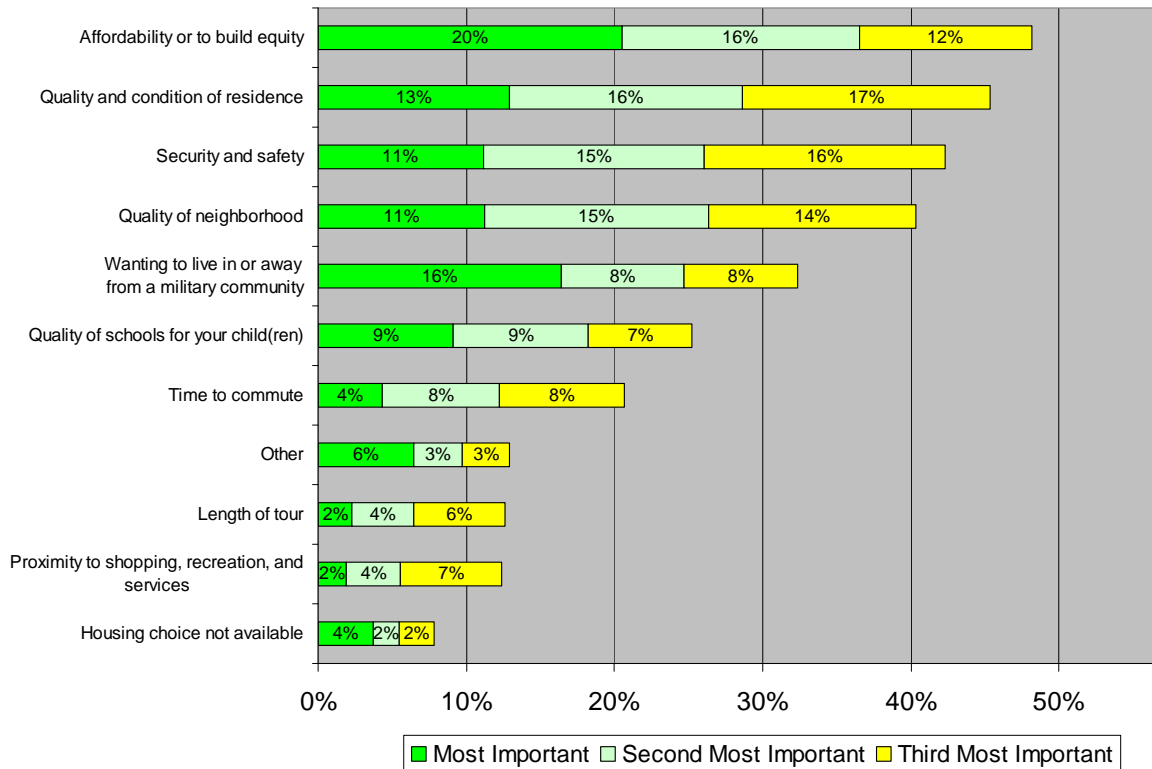
As Figure 3-1 shows, affordability and building equity was the overall most influential decision factor, with approximately 48 percent of all respondents citing it as one of their top three priorities. Additionally, this factor is most often identified (20 percent) as the one most important factor.

Quality and condition of the residence ranks as the second most influential factor overall, with 46 percent of respondents citing it as one of their top three influencing factors.

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<sup>1</sup> See Appendix F for the results by service.

Figure 3-1. Housing Characteristics Influencing the Housing Decision



Security and safety, and quality of the neighborhood round out the top four influencing factors, with 43 and 41 percent of respondents, respectively, listing them among the top three factors influencing their housing decision.

The implications of these findings make socioeconomic sense: Military families want a residence they can afford, and they want a residence that meets their standard of quality and be in a safe and secure neighborhood. It seems reasonable to conjecture that these factors would be the same for non-military families when it comes to making housing decisions.

A noteworthy finding is that wanting to live in a military community by those who live in privatized or military housing, or wanting to live away from a military community by those who own or rent in the local community, ranks fifth overall as an influencing factor, with 32 percent of respondents placing it among their top three. However, in terms of the percentage selecting this characteristic as the most important factor, it is second only to affordability and building equity. Eighteen percent of service members living in the community cite both affordability and wanting to live away from a military community as the most important influencing factors. Service members living in military family housing or privatized housing cite wanting to live in a military community as the third most important influencing factor (after affordability, and safety and security of the neighborhood).

These findings have important implications for DoD housing policy: One-third of families know that they definitely do, or do not, want to live in the military community, and building (or not building) privatized housing is not likely to change their minds.

Significantly fewer respondents cited quality of schools, time to commute, other (not specified), length of tour, proximity of shopping, recreation, services, and unavailability of their housing choice as influencing factors.<sup>2</sup> With regard to commute time, however, it is important to note that this survey occurred when the national average for gasoline was approximately \$3.00 per gallon.<sup>3</sup> In just over a year, the national average for gasoline had soared by more than another \$1.00 per gallon.<sup>4</sup> The effect of gas prices on commuting will likely be a continuing influence factor for service members, as it is for the general public.

The 1997 RAND study asked similar questions regarding the first and second most important factors when choosing family housing, and the results were very similar. Affordability or good economic and investment decisions was the first or second most important factors for more than half of the owners and military housing families, while freedom or privacy of the civilian community were the first or second most important factors for more than half of the renters in the community. While the high importance of these factors is very similar between the current and RAND studies, the importance of other factors varied significantly between the two studies.

Both the 2003 and 2005 DMDC Status of Forces Survey of Active Duty Members asked respondents how important a select set of characteristics were in deciding where to live. The set of characteristics and the percent of service members rating the characteristics as either very important or important are presented in Table 3-2. Safety of the neighborhood was rated very important or important by 87 percent of service members in both DMDC surveys.

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<sup>2</sup> For those living in military family housing or privatized housing, which typically tends to be close to the installation, we asked if the time to commute to the base was an influencing factor. For service members living in the community, we asked if time to commute for the spouse was an influencing factor.

<sup>3</sup> Steve Hargreaves, "Watch out: Here Comes \$4 Gasoline," CNNMoney.com, [http://money.cnn.com/2007/04/26/news/economy/gas\\_prices/index.htm](http://money.cnn.com/2007/04/26/news/economy/gas_prices/index.htm), April 26, 2007, accessed June 30, 2008.

<sup>4</sup> Ben Rooney and Kenneth Musante. "Oil Rises as Gas Prices Hit All-Time High." CNNMoney.com. <http://money.cnn.com/2008/06/30/news/economy/gas/index.htm?postversion=2008063012> June 30, 2008, accessed June 30, 2008.

*Table 3-2. Importance of Select Characteristics In Deciding Where to Live—  
2003 and 2005 Survey Results*

Characteristic	2003 Survey percentage indicating factor was very important or important	2005 Survey percentage indicating factor was very important or important
Safety of the neighborhood	87	87
Access to facilities	76	Not asked
Distance to work	72	74
Quality of schools	68	70
Support Services on-base	64	Not asked
Access to support services and facilities on base	Not asked	67

## Chapter 4

# Satisfaction with Housing

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In this chapter, we assess the satisfaction of service members with their choice of housing. These survey questions focused on how satisfied the respondents were, but not the reasons for their responses.

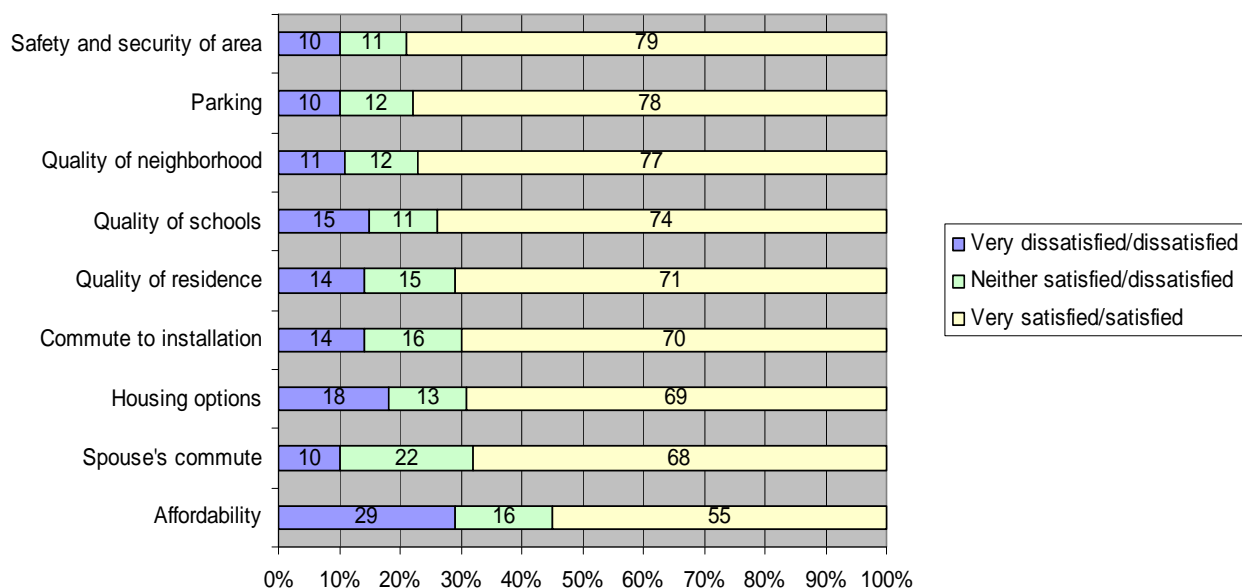
In the 2007 DMDC survey, we asked respondents to indicate their level of satisfaction with nine housing and community characteristics.

**2007 DMDC Question 101: How satisfied are you with the following characteristics of your current residence and community at your permanent duty station?**

- a. **Choice of housing options**
- b. **Affordability**
- c. **Quality and condition of residence**
- d. **Time to commute to installation**
- e. **Time to commute to spouse's workplace**
- f. **Quality of schools for your child(ren)**
- g. **Quality of neighborhood**
- h. **Security and safety of the area**
- i. **Parking at your residence.**

Figure 4-1 shows the percentage of respondents who indicated their level of satisfaction with each of these nine characteristics. As the details in Appendix F show, respondents in higher pay grades consistently reported higher satisfaction than those in lower pay grades. Additionally, in all categories except spouse's commute, respondents who own their residence reported higher levels of satisfaction than service members living in other types of housing.

Figure 4-1. Satisfaction with Housing Traits of Current Residence



## SATISFACTION WITH HOUSING CHARACTERISTICS

Respondents reported the highest percentages of very satisfied or satisfied responses for safety and security of the area, parking, and quality of the neighborhood (79, 78, and 77 percent, respectively).

### Safety and Security of Area

A higher percentage of homeowners were satisfied with safety and security (89 percent) than other respondents. Those in privatized units and renting in the community were also satisfied, but at lower levels: 79 and 77 percent, respectively. Respondents living in military family housing gave the lowest percentage of satisfied responses (60 percent). As the detailed discussion in Appendix F shows, members of the Marine Corps, Air Force, and Navy were 84 percent satisfied, whereas members of the Army were only 74 percent satisfied with safety and security.

These findings indicate that satisfaction with safety and security of military family housing residential areas lags significantly behind all other housing types, and by wide margins: 60 percent for military family housing compared with 77 to 89 percent for all others.



## Parking

Eighty-seven percent of respondents who own their house say they were satisfied with parking at their home, while only 72 percent of respondents renting in the community were satisfied with their parking situation. Survey respondents living in military family and privatized housing reported even lower percentages of satisfied responses (65 and 61 percent, respectively). The percentage of satisfied respondents is comparable among all four services, with 79 to 74 percent of respondents reporting satisfaction. When it comes to the adequacy of parking, military family housing and privatized housing lag significantly behind living in the community.

## Quality of Neighborhood

Overall, respondents were satisfied or very satisfied with the quality of their neighborhoods. Those who own their residences or rent homes in the local community reported a higher rating of satisfaction than those living in privatized or military family housing. Members of the Air Force, Marine Corps, and Navy have higher levels of satisfaction (between 81 and 84 percent) than members of the Army (71 percent).

This relatively high level of satisfaction with quality of the neighborhood, even for military family housing and privatized housing, is an important finding, primarily because this housing attribute is second only to affordability as an important factor in housing decisions.

## Quality of Schools

Approximately 74 percent of respondents indicated they were either satisfied or very satisfied with the quality of local schools. The most satisfied were respondents who own their residences, are in the Navy, or hold a rank of E7 and above. Respondents living in military family housing gave the lowest percentage of satisfied responses: 60 percent.

This factor has long been a difficult one for military families with children. Although service members want affordable housing in a quality neighborhood that is safe and secure, they are also concerned about the education of their children. The results indicate that service members regard that military family housing has the lowest quality of schools, compared to alternative housing options. As the remaining military family housing units are privatized over the next 5 to 10 years, DoD and the services will likely need to investigate ways to improve satisfaction with schools to maintain desired occupancy levels.

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## Quality of Residence

Most of the respondents were satisfied or very satisfied with the quality and condition of their residences. Specifically, those who own their residences, as well as E7 and above, were very satisfied, while residents of military family housing reported the lowest percentage of satisfied responses (45 percent). Within the services, members of the Navy were the most satisfied with the quality of their residences, followed closely by the Air Force. Meanwhile, the Army and Marine Corps had the lowest percentage of satisfied responses.

By comparison, the 1997 RAND study found that satisfaction with the quality of residence varied significantly by type of housing. The large majority of owners (92 percent) and renters (68 percent) were satisfied, while only 59 percent of those in military family housing were satisfied.

## Commute to Installation

Overall, respondents were satisfied with the commute time to their installations. In all categories, the level of satisfaction ranged from 60 percent to 80 percent of respondents. The most satisfied with their commute lived in privatized housing, followed by those in military family housing. Conversely, slightly fewer community residents (owners and renters) reported being satisfied with their commute to the installation. Within the services, members of the Army were the most satisfied with their commute, followed by the Air Force. The Navy and Marine Corps were equal, with 60 percent of respondents satisfied or very satisfied. Navy member responses were probably influenced by the proximity of their installations to metropolitan areas and the high proportion of military and privatized housing sites located off-base. Seventy-one percent of service members in both the E5 and E6, and E7 and above pay grade categories reported satisfaction with their commute, while fewer junior enlisted personnel reported satisfaction.

The dramatic increase in the price of gasoline since the 2007 survey could be expected to drive future satisfaction with commute times and distances lower, especially for those living in the community. This trend could present opportunities for privatization partners to increase occupancy rates further, as the cost of long commutes continues to weigh more heavily on family budgets. This topic should be studied in more detail in future surveys.

## Choice of Housing Options

The survey indicated that service members were somewhat satisfied with their choice of housing options. Once again, homeowners revealed a significantly higher level of satisfaction than renters, residents of military family housing, and residents of privatized housing, who were the least satisfied with their housing option. Among the services, the Navy had the highest percentage of satisfied service members. Additionally, respondents in pay grades E7 and above were

significantly more satisfied than those in the lower grades, most likely because those in higher grades were also much more likely to be homeowners.

The results by pay grade may indicate that junior enlisted families do not have the same level of savings or total household income as families in higher grades, making it significantly more difficult for them to own.

## Spouse's Commute

Overall, respondents were satisfied with their spouse's commute time to work. Although the range of satisfaction with spouse commute time was fairly small, respondents who owned their residences, respondents in the Army, and respondents E7 and above were the most satisfied. The least satisfied respondents were spouses from E1 through E4, with only 54 percent reporting that they were satisfied or very satisfied with the spouse's commute.

## Affordability

Affordability is one of the most important factors driving a service member's housing choices, according to the DMDC survey results. However, the same service members also reported that they were the least satisfied with the affordability of their current housing. This revelation is not surprising because most people would prefer to have the same product at a lower price, and housing prices (for both owning and renting) had reached an apex at the time of the survey. A larger percentage of homeowners were satisfied with the affordability of their residences than renters, residents of privatized housing, and residents of military family housing.

In the 1997 RAND study, 63 percent of owners were satisfied with affordability, similar to the 61 percent of owners among the DMDC respondents. Additionally, the RAND and DMDC renter respondents had similar levels of satisfaction with affordability (42 and 48 percent, respectively). However, we noted a marked difference for those in military family and privatized housing between the two studies. Almost two-thirds (65 percent) of the RAND respondents in military family housing were satisfied with affordability compared with only 47 and 49 percent of those in military family and privatized housing among DMDC respondents. In 2001, the Cohen Housing Allowance Initiative increased BAH rates over a 4-year period to reduce and eventually eliminate amount of out-of-pocket expenses. Previously, congressional statute limited BAH to 85 percent of the average local cost for housing. The increase in BAH rates may be one reason that military families are less satisfied with the affordability of housing compared to 1997 when off-base housing cost more than BAH.

# LOCAL HOUSING MARKET CONDITIONS AND SATISFACTION

Although the information above outlines the general levels of satisfaction with the nine housing traits at the time of the study, it is important for DoD and the military services to consider the economics of local housing markets and its impact on satisfaction to make informed decisions about their housing privatization programs. For that reason, we assigned the installations to one of five categories based on occupancy rates for the privatization project and for the surrounding area as indicated in the U.S. Census Bureau’s American Community Survey 2006. Table 4-1 defines these categories and matches the sampled 29 installations with the appropriate category.<sup>1</sup>

*Table 4-1. Combined Privatized and Community Housing Occupancy Rates Categories*

Category	Description	Installations
A	High privatization occupancy and high market occupancy (high/high)—Occupancy rates for both the privatization project and housing in the local area are above 90 percent.	Fort Hood, TX; Lackland AFB, TX; Fort Carson, CO; and Fort Campbell, KY
B	High privatization occupancy and low market occupancy (high/low)—Occupancy is above 90 percent for the privatization project and below 90 percent for the local housing market.	Fort Belvoir, VA; Fort Lewis, VA; San Diego Metro, CA; Norfolk Metro, VA; SD Metro (USMC), CA; MCB Camp Lejeune, NC; Elmendorf AFB, AK; Scott AFB, IL; Hanscom AFB, MA; Kirtland AFB, NM; and Fort Drum, NY
C	Low privatization occupancy and high market occupancy (low/high)—Occupancy is below 90 percent for the privatization project and above 90 percent for the local housing market.	Fort Bliss, TX; Wright-Patterson AFB, OH; and Fort Benning, GA
D	Low privatization occupancy and low market occupancy (low/low)—Occupancy is below 90 percent for both the privatization project and housing in the local area.	Great Lakes Metro; Nellis AFB, NV; Schoffield Barracks, HI; and Fort Meade, MD
E	Remaining installations—Four installations included in our analysis were not privatized at the time of the DMDC survey, so the privatization occupancy rate was not applicable for them. Additionally, two installations had no U.S. Census Bureau data available on the occupancy rate of the local housing market.	Fort Sill, OK; Vandenberg AFB, CA; and Warren AFB, WY; in addition, market vacancy data were not sufficient for Fort Rucker, AL, and Fort Leonard Wood, MO

Note: AFB = Air Force base; USMC = U.S. Marine Corps; and MCB = Marine Corps base.

Table 4-2 shows the rates of satisfaction with the housing attributes under these varying market conditions.

<sup>1</sup> Occupancy rate data from Appendix A, Table A-1

Table 4-2. Satisfaction Rates for Housing Attributes Under Different Housing Market Conditions (Percentage Very satisfied or Satisfied)

	Category: privatization occupancy/market occupancy			
	A: high/high	B: high/low	C: low/high	D: low/low
Choices	72	77	58	76
Affordability	49	72	40	72
Quality	76	76	62	79
Commute time	67	75	60	80
Spouse commute	68	76	54	70
Schools	78	80	70	70
Neighborhood	81	82	75	76
Security & safety	78	80	70	74
Parking	76	83	66	78

Satisfaction rates for all nine housing attributes were lowest among service families living in areas with low privatized housing occupancy and a relatively tight (high occupancy) local housing market (category C, or low/high). The tight local housing market makes it difficult to obtain community housing that is affordable and meets other criteria of quality, safety, and commuting time (for example, less than half were satisfied with affordability). Yet, the housing privatization project has occupancy below 90 percent.

We were not able to discern why this is occurring, but one possible explanation is that housing privatization projects in this category are early in the initial development plan, so the housing units may currently be less desirable than those in the community. Alternately, it could be that these installations have more privatized units than they need for housing service members. Without a closer look at the privatization projects and the local market conditions for the installations in this category, it is impossible to identify with certainty why service members elected to live in the community. However, given the low satisfaction ratings, it appears that the privatization partner may have an opportunity to draw some service members in from the local community.

The next lowest satisfaction rates occurred in markets with high occupancy of privatized housing and a tight local housing market (category A, or high/high). Although satisfaction rates in this category were still significantly higher than in the low/high market situation described above, several of the installations included in the high/high category were privatized before 2005. Additionally, many of these are located in or near a major metropolitan area, such as San Diego, Norfolk, Albuquerque, and Tacoma. However, without a closer comparison of local market conditions at the nine installations in this category, we cannot explain why the occupancy was low in privatized housing at the category C bases compared to that in the category A bases, considering that both categories involve relatively tight local housing markets.

The two categories where the local housing market was not tight—B, high/low, and D, low/low—present an interesting comparison as well. As would be expected, and in stark contrast to the two situations where the local market was relatively tight, service families were fairly satisfied with affordability. Furthermore, in both situations, families were also fairly satisfied (70 percent or higher) with all other housing attributes. In other words, when the local housing market is not tight, service families were generally able to find the housing that they want—whether military family housing, privatized housing, or in the community—at affordable prices and that meets their desired standards for quality, schools, safety, and commute time. But when the local housing market is relatively tight, less than half of the service families could find housing they considered affordable, and their satisfaction with other important housing attributes was lower.

## RESULTS FROM THE 2003 AND 2005 DMDC SURVEYS

Like the 2007 DMDC Status of Forces Survey of Active Duty Members, the 2003 and 2005 DMDC surveys asked responders to indicate how satisfied they were with various characteristics of their current residence and community at the service member’s permanent duty station. Five of the characteristics were included in the 2003, 2005, and 2007 surveys: cost of residence, safety of the area, distance to work, quality of schools, and quality and condition of residence.

Satisfaction with four of these five characteristics stayed relatively consistent between 2003 and 2007. The only area that showed significant improvement was satisfaction with the quality of schools. In 2003, only 34 percent of service members were satisfied with the quality of schools. However, in 2007, the percentage satisfied with the quality of schools increased significantly to 75 percent. Table 4-1 shows the percentage of service members that were satisfied (either responded very satisfied or satisfied) and dissatisfied (either responded dissatisfied or very dissatisfied) with these five characteristics for each survey year.

*Table 4-3. Service Member Satisfaction with Characteristics of Residence and Community—Results from 2003, 2005, and 2007 Surveys (Percentage)*

Characteristic	2003 Survey		2005 Survey		2007 Survey <sup>a</sup>	
	Satisfied	Dissatisfied	Satisfied	Dissatisfied	Satisfied	Dissatisfied
Safety of the area <sup>b</sup>	72	11	73	10	69	11
Distance to work	72	12	75	10	69	12
Quality of schools	34	13	66	17	75	15
Quality and condition of residence	60	30	59	23	59	21
Cost of residence <sup>c</sup>	52	20	43	33	51	26

<sup>a</sup> The 2007 survey results included all survey responders, not just the subset used in the LMI analysis.

<sup>b</sup> In 2007, responders were asked to rate their satisfaction with the safety and security of their residence.

<sup>c</sup> In 2007, responders were asked to rate their satisfaction with the affordability of their residence, not the cost.

# Chapter 5

## Housing Expenses

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In this chapter, we examine how much service members are spending on family housing, using household income and BAH rates as bases.<sup>1</sup> To ensure representation across all regions of the country, we did not limit our analysis to the 29 installations.

### AS A PERCENTAGE OF HOUSEHOLD INCOME

#### Rent or Mortgage

**2007 DMDC Questions 74, 75, 77, and 78: What were your total military gross earnings and your spouse's estimated total yearly gross earnings) in 2006 before taxes? (Please include all allowances, special pay, basic pay, bonuses, overtime, and income from a second job). In 2006, how much income did you and your spouse receive from the following sources: net gains or losses from sale of stocks, bonds, or real estate; interest income; dividends; child support/alimony; social security; welfare assistance; and net rent, trusts, and royalties from any other investments or business?**

**2007 DMDC Question 102. What is your monthly rent or mortgage payment? If you live in military-provided housing and you do not pay rent, enter "0".**

Using the household income and rent or mortgage expense data provided by the survey respondents, and after eliminating all responses from households with income less than \$14,000, we calculated the amount of rent as a percentage of household income.<sup>2</sup> We found that the median value was 26 percent, which was slightly higher than the 22 to 23 percent reported in the 2005 American Housing Survey for the United States and the 25 percent reported in the Bureau of Labor Statistics 2006 Consumer Expenditure Survey.<sup>3</sup>

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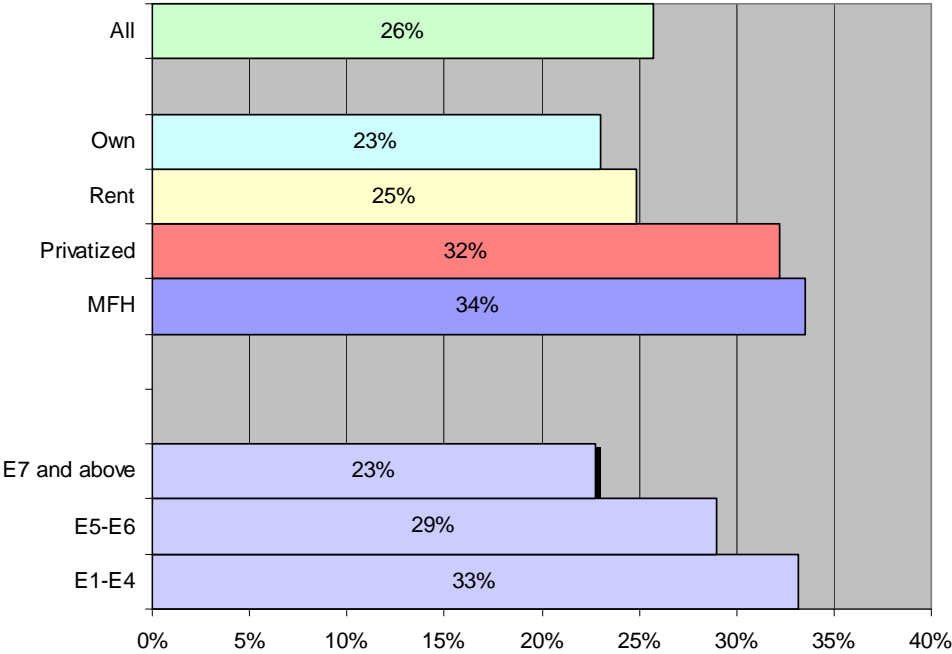
<sup>1</sup> Annual household income includes annual gross earnings for military member and their spouse including all allowances, special pay, basic pay, bonuses, overtime, second job, investments, child support and alimony, social security, and welfare assistance.

<sup>2</sup> In 2006, the basic pay for E-1 with less than 4 months of service, not including the basic subsistence allowance, was \$1,178 per month or \$14,136 annually. As such, we used \$14,000 as the lower threshold for annual income.

<sup>3</sup> U.S. Census Bureau, Current Housing Reports, Series H150/05, *American Housing Survey for the United States: 2005*, p. 80.

Figure 5-1 shows median values for rent or mortgage as a percentage of household income for all respondents, as well as by the respondent’s type of housing and pay grade.

Figure 5-1. Rent/Mortgage as Percentage of Household Income



We found several reasons for the differences between owners and renters in the community and those living in military family and privatized housing. One, owners tend primarily to be in the higher pay grades; two, renters have a higher proportion of “married without children,” so they are likely to have a higher proportion of dual income households; three, military family housing has a higher proportion of junior enlisted families; and four, both military family and privatized housing require no out-of-pocket expense for rent, which is more attractive to families with lower household income.

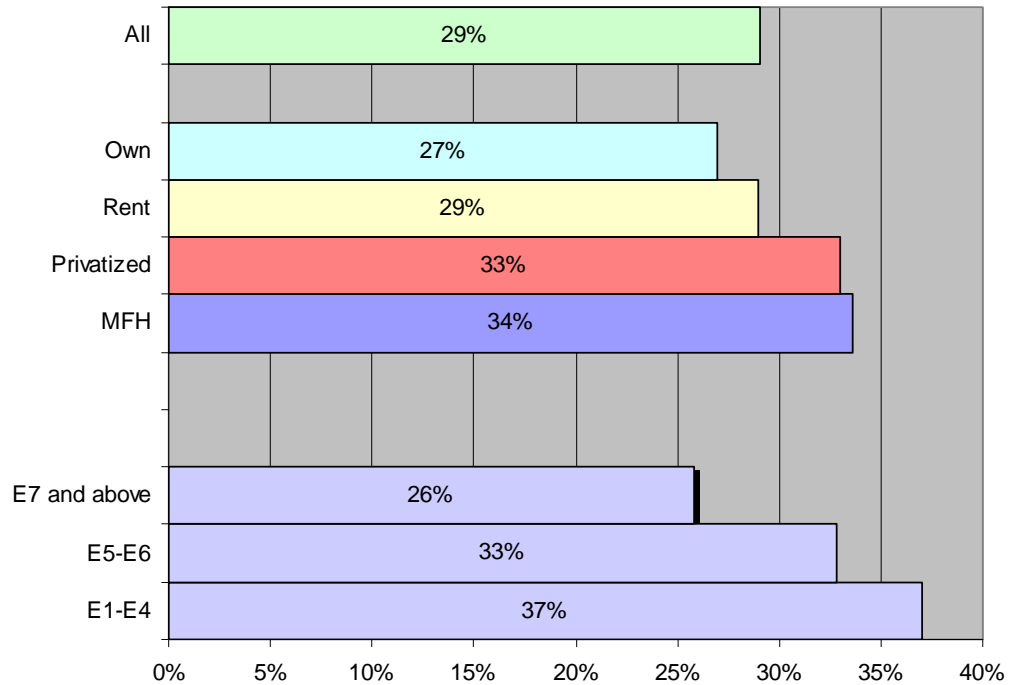
### Rent Plus Utilities

**DMDC Question 103.** What is your typical monthly expenditure on the following? *If utilities are included in your rent or you have other living arrangements where you do not pay utilities, enter “0”.*

We also assessed the cost of rent and utilities as a percentage of household income. As Figure 5-2 shows, the median value was 29 percent, 3 percentage points higher than rent only as a percentage of household income.



Figure 5-2. Rent/Mortgage and Utilities as a Percentage of Household Income



The reasons for the difference between owners and renters in the community and those living in military family and privatized housing are the same as the reasons given above for rent as a percentage of household income.

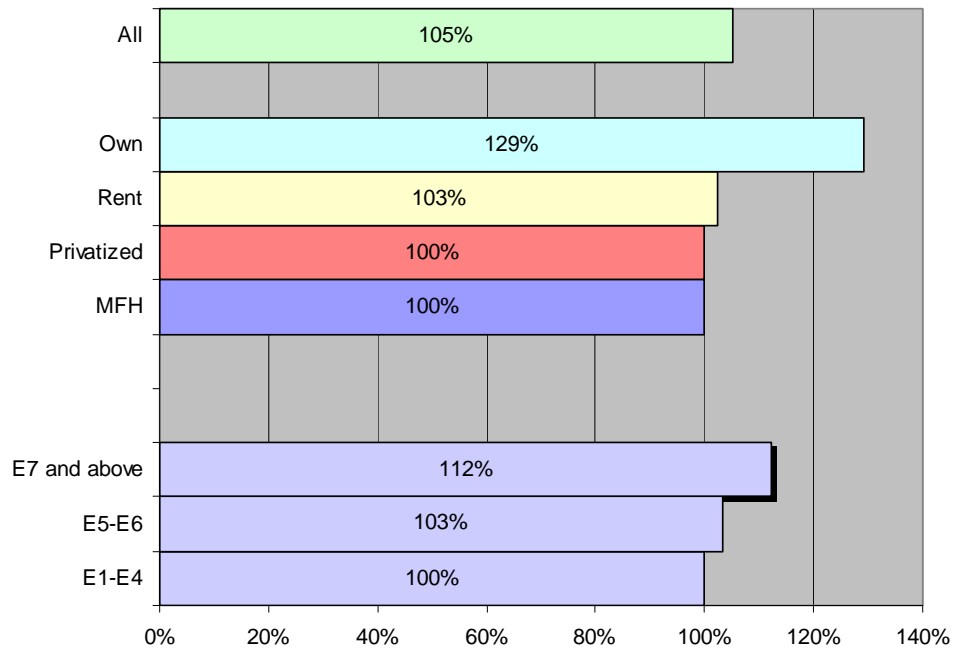
## AS A PERCENTAGE OF BAH

### 2007 DMDC Question 86: What is the zip code of your residence at your current permanent duty location?

To calculate rent and utilities as a percentage of BAH, we first identified a reasonable BAH rate for each survey respondent because the survey data did not include this information. We then mapped each response to a military housing area using the base ZIP code and determined the with-dependent BAH rates for the military housing area using the appropriate 2007 BAH table. We called the result the assumed BAH rate, since we were unable to determine the actual BAH rate for each respondent. Next, using the rent or mortgage expense data provided by each survey respondent, we calculated the rent plus utilities as a percentage of BAH for each respondent and identified the median value.

We found that the median value for rent as a percentage of BAH was 105 percent, meaning that service member families overall pay 5 percent more for rent than their assumed BAH rate provides. Figure 5-3 shows these results by housing type and pay grade.

Figure 5-3. Rent Plus Utilities as a Percentage of BAH



By definition, the cost of rent and utilities in military housing should equal BAH. Similarly, at the time of the study, the rental payment in most privatized locations included utilities and was also equal to the service member's BAH rate. Based on the results of this survey, we found that 50 percent of renters pay 3 percent or less out of pocket, while 50 percent of owners pay 29 percent or less above their assumed BAH rate for housing expenses.

Another look at Figures 5-2 and 5-3 shows that home owners spend a lower percentage of their household income, but a higher percentage of their BAH, on housing compared to those that rent. This result suggests that owners tend to have higher household incomes than renters and they spend more out of pocket on their real estate investment than those living in rental units.

## AVERAGE MONTHLY RENT OR MORTGAGE

Both the 2005 and 2007 DMDC Status of Forces Survey of Active Duty Service Members asked *What is your monthly rent or mortgage payment?*

Based on DMDC's analysis of all responses to this question, not just those in the United States and the District of Columbia, the average monthly rent or mortgage increased from \$708 in August 2005 to \$1,247 in April 2007. The reasons for this increase are uncertain, but early 2007 marked the height of the housing market boom. Additionally, we noted that the 5 to 6 percent annual increases in BAH rates between 2000 and 2009 may also have contributed to the difference in average monthly rent reported in the 2005 and 2007 DMDC surveys.

# Chapter 6

## Conclusions and Recommendations

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### GENERAL OBSERVATIONS

A number of key events affecting housing choices have occurred since RAND's 1997 survey. They include the significant increase in BAH rates associated with the Cohen legislation, the growing trend toward privatization, and the recent adverse housing market. These events unquestionably will continue to influence choices to varying degrees. Future surveys and analyses should provide decision makers with improved insight to support housing program decisions.

The questions in this survey were designed to obtain information on housing choices or preferences, not to delve into the reasons for those choices or preferences. Although summary responses may lead readers to ask why members make their choices, we have been careful not to speculate about how additional factors may influence service member choices.

We believe that it is critically important for DoD to maintain focus on the privatized housing in future surveys. The majority of U.S. government housing will shortly have been privatized. Insights from housing choices surveys and analysis should provide the Office of the Secretary of Defense and the military services with vital information to assist in guiding partnership decisions affecting privatized housing scopes, locations, and investments.

### COMPARISON OF RESPONSES FOR SERVICE MEMBERS LIVING IN GOVERNMENT-OWNED UNITS AND PRIVATIZED UNITS

One primary area of interest was on how privatization compares to military family housing. Using the results of the DMDC survey and our detailed analysis of the subset of responders identified in Chapter 1, we were able to compare responses for service members living in privatized housing with those from service members living in government-operated military family housing. With minor exception, responses from service members living in military family housing were not significantly different from the responses from service members living in privatized housing.

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## Housing Choice

When comparing the results for question 94—*Which of the following best describes your first housing choice at your permanent duty locations? Privatized military housing, military housing, or community housing*—between residents of military family housing and residents of privatized housing, we found that the majority of both sets of residents were living in their preferred choice. Fifty-seven percent of residents in military family housing selected it as their first choice, while 62 percent of residents living in privatized housing selected that housing as their first choice.

## Decision Factors

Residents of both military family and privatized housing reported that similar factors influenced their housing decisions. Affordability, and safety and security were the most important factors for both groups of service members. Slightly more service members living in privatized housing indicated that quality and condition of the residence and quality of the school as most important compared to residents of military family housing. Aside from these small differences, residents of military family and privatized housing noted that the same factors influenced their housing decisions.

## Satisfaction

An analysis of the results from question 101—*How satisfied are you with the following characteristics of your current residence and community at your permanent duty station?*—showed that service members in both types of housing were similarly satisfied with their housing options, affordability, commute to installation, and parking. For these four characteristics, the two groups were within 4 percentage points of each other. Given that the margin of error for most of these questions was between 2 and 4 percent, we found no significant difference in satisfaction in these categories between residents of military family housing and those living in privatized housing. However, service members living in privatized housing appear to be more satisfied with the quality of their residence, spouse's commute, quality of schools, and safety and security of the area than service members living in military family housing (see Appendix F for the detailed results).

## Housing Expenses

Service members living in military family and privatized housing spent approximately the same amount of BAH and percentage of income on housing expenses. This finding should be expected because rent in privatized housing is tied to the resident's BHA rate and service members forfeit the same amount of BAH when living in military family housing.

## CONCLUSIONS

This section presents our key conclusions grouped by the general topics to which they relate.

### Housing Options

The vast majority of service families are living in the type of housing they find most preferable.

As expected, a higher percentage of junior enlisted personnel are living in military family housing than the higher grades. Additionally, the percentage of families renting is significantly higher for the junior enlisted personnel than for the other pay grades. Like their private-sector counterparts, a lower percentage of members in junior pay grades own their homes compared to higher pay grades.

We found a higher percentage of ownership compared to the RAND study conducted in 1997. This statistic is likely to fluctuate over the next several years as more stringent lending practices emerge from the current housing market turmoil.

The AHRN website appears to be underused. Only 17 percent of respondents indicated that they used the website to find housing at their current duty station; however, the majority of AHRN users were satisfied with this resource.

Service-specific websites were the least consulted sources of housing information, but satisfaction with those sources was also relatively high among those who used them.

### Decision Factors

Affordability is the most frequently cited influencing factor for both service members and civilians, yet it is also the characteristic with which they are least satisfied. This result is similar to that from the 1997 RAND study.

Service members appear to have a strong desire to either live in a military community or away from one. For those living in the local community, affordability and wanting to live away from a military community are cited as the most important influencing factors. Conversely, service members living in military family or privatized housing rated wanting to live in a military community as the third most important factor, after affordability and safety and security of the neighborhood.

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## Satisfaction

Service members in higher pay grades are more satisfied with all nine housing characteristics than are those in lower pay grades. A larger percentage of homeowners are more satisfied than service members living in other types of housing for all characteristics except the commute to the base.

Service members in all types of housing are most satisfied with the safety and security, parking, and quality of the neighborhood. They are least satisfied with the affordability of their residence and community; the satisfaction rates with affordability have decreased significantly since the 1997 RAND study.

Service members living in areas with a tight (high-occupancy) local housing market are generally less satisfied than those living in markets with lower occupancy rates. The least satisfied are service members living at installations with a tight local housing market, but low occupancy in the privatized housing project.

## Housing Expenses

Service members spend approximately 26 percent of their household income on rent or mortgage payments. When utilities are included, this share increases to 29 percent. While the share for rent is a bit higher than among civilian counterparts, the share for rent plus utilities is consistent with data from the U.S. Bureau of Labor Statistics.

Overall, service members have rent or mortgage payments slightly higher than their BAH. Owners and service members in pay grades E7 and above tend to spend a higher percentage above the BAH than other service members.

## KEY RECOMMENDATIONS

Our key recommendations are summarized below:

- ◆ *Promote AHRN as a greater information resource.* Given that 57 percent of respondents said they contacted military housing offices for information, housing offices should encourage increased use of AHRN.
- ◆ *Review the role and effectiveness of service-specific housing referral websites.* Although the majority of service members who used these websites were satisfied, the links to privatized housing should be made more prominent. Additionally, DoD should offer advantages and efficiencies to jointly promoting AHRN and the services offerings, insofar as they are not duplicative.

- ◆ *Focus on keeping housing options affordable for service members.* Military families identified affordability as the single most important housing characteristic, but also the least satisfying.
- ◆ *Encourage occupancy in privatization areas with low occupancy.* This result could partially be achieved by encouraging business partners to adjust rental rates to better align with market rent. Ultimately, the value proposition for each privatized neighborhood must consider investment options including revitalization, replacement, or demolition.
- ◆ *Closely monitor the significance of commuting time and distances.* Future surveys may reveal a growing preference for military and privatized housing.
- ◆ *Investigate ways to improve satisfaction with schools.* Quality of schools is an influencing factor at most installations and can impact the occupancy rates of military family and privatized housing units.
- ◆ *Monitor trends in satisfaction levels over time.* Since the 1997 RAND study, satisfaction rates with the quality of military family housing have dropped significantly. As more of the military family housing inventory is privatized, and more privatized housing is available, renovated, or replaced, we would anticipate seeing an increase in overall satisfaction with housing quality. More important, satisfaction with affordability of housing has dropped in the 10 years between these two studies even though BAH rates have increased significantly during this same time period. The current turmoil in the housing market, and expected long-term changes in the availability of loans and the supply of housing, could further influence satisfaction with affordability. Alternatively, this same turmoil could present an opportunity for privatization to respond with quality affordable housing for service families.
- ◆ *Investigate anomalies in occupancy rates.* Further analysis is necessary to understand the unusual relationship between occupancy rates in privatized housing and some local markets. Of particular interest are locations with a tight housing market, but low occupancy in privatized housing. We believe that an excellent opportunity exists to increase privatization occupancy rates in these markets.

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- ◆ *Develop a separate, focused DMDC housing survey and consolidate all service housing surveys and results.* The DMDC survey of active duty service members allowed us to add the same housing-related questions for military members in all of the services living in the military community as well as the local community. However, a separate DMDC housing-focused survey should be developed as an alternative, primarily because of the constraints imposed by “not making a long survey even longer.” A focused housing survey could delve deeper into a number of areas. In addition, a larger sample could be taken at a small number of carefully selected bases that run the gamut of local housing market conditions, regions of the country, military family housing, and privatized housing availability and occupancy levels. Similarly, we believe that housing and competitive sourcing should assume a clearing house role in coordinating and consolidating service surveys and results for all service members living in military family housing, privatized, and community housing to ensure common data are shared and that service members are not “over surveyed.”

This study is a key first step in understanding the military service members’ housing decision process and how well DoD is meeting the needs of the members’ families. Since this is the first time that the entire family housing decision process has been studied, and the first time that satisfaction of residents in privatized housing has been compared with that of residents of other forms of housing, we consider our results an important baseline in understanding the workings—and the success—of family housing. The same or similar studies should continue every few years, while military housing continues its transition to privatized housing, and while the economics of the housing and energy markets fluctuate significantly. Periodic studies would further allow housing and competitive sourcing to better understand the housing decision process and the factors that drive its success.



# Appendix A

## Study Methodology

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The April 2007 Status of Forces Survey of active duty member conducted by DMDC every two years served as the primary data collection tool for our analysis. In addition to general demographic information, LMI and OSD worked closely with DMDC to include detailed housing questions important to our study. The results from this survey are the basis for the results presented in this report. Below, we identify the questions included in our study, the sources for local market information, and the methodology for analyzing the results.

DMDC asked the housing questions to all respondents of the survey, whether or not the service member met the “family” definition (had a spouse or other dependents living with them at their permanent duty station) and regardless of the location of their permanent duty station (CONUS or OCONUS). DMDC performed an analysis of the responses that included all of these respondents. The LMI analysis included only respondents defined as “families” with a permanent duty station in the 50 states and the District of Columbia because the housing choice questions were specifically crafted to apply directly to the housing situation facing these families. Therefore, any differences between the DMDC and LMI results are due to the inclusion by DMDC of non-families and families stationed outside the United States, and these are a significant proportion of the total respondents.

### DMDC STATUS OF FORCES QUESTIONNAIRE

LMI and OSD worked closely with DMDC to craft housing related questions that were added to the April 2007 Status of Forces survey. In total, we asked 20 housing-related questions on the DMDC survey. Additionally, general demographic questions, such as service, pay grade, marital status, number of dependents, location of permanent duty station, housing type at permanent duty station, and household income, were used to frame our analysis. See Appendix B for a list of all questions included in the April 2007 Status of Forces Survey of active duty members. The housing questions are numbered 86 through 106.

### SOURCES FOR LOCAL MARKET CHARACTERISTICS

In addition to the DMDC data, we were also interested in assessing whether differences in local market conditions impacted service members satisfaction with housing. In order to gain an adequate number of responses to conduct analysis based on local market conditions (crime, schools, and vacancy rates) and occupancy of privatized housing, we asked DMDC to oversample at 29 installations.

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Using the occupancy rates from the December 2006 program evaluation plan (PEP), we identified the privatized housing occupancy level as “low” for any location with occupancy below 85 percent. For installations with occupancy above 85 percent, we identified the privatized housing occupancy level as “high.” Four of the 29 installations had not yet been privatized and therefore were assigned a privatized housing occupancy level of NA.

To determine the quality of the schools at each installation, we identified the school proficiency scores for math and reading for school districts near each installation. We compared the average of all school districts near the installation with the state score. When the average score was higher than the state average, we identified the quality of school as being “above” the state average. Conversely, when the average score was lower than the state average, we identified the school as being “below” the state average. In some cases, we were unable to obtain proficiency scores for the local school districts and/or the state. Those instances are identified with “no data” in the school statistics column.

For each installation, we identified a crime statistic based on violent crime and property crime reported in 2005 by the Department of Justice’s Uniform Crime Reporting Program website.<sup>1</sup> First, we identified the cities closest to the installations oversampled by DMDC. Next, we pulled the population, violent crime, and property crime statistics from the website and calculated the violent and property crime per capita. For installations with either violent crime or property crime per capita was higher than the national average, we identify the crime statistic as being “high.” For installations where the average violent *and* property crime per capita was less than the national average, we identify the crime statistic as being “low.”

To determine the market vacancy for each installation, we used the rental housing vacancy statistics reported in the Census Bureau’s 2006 American Community Survey for metropolitan statistical areas for each installation. If the vacancy rate was above 10 percent, we identified the market as having “high” vacancy. For locations with rental vacancies below 10 percent, we identified the market vacancy as “low.” For two installations, we were unable to obtain market vacancy data. As such, the market vacancy column for these two installations is labeled “no data.”

Table A-1 presents the 29 installations and the local market housing conditions for that installation or geographic area.

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<sup>1</sup> The crime statistics used in our analysis can be found on the Federal Bureau of Investigation’s website [http://www.fbi.gov/ucr/05cius/data/table\\_08.html](http://www.fbi.gov/ucr/05cius/data/table_08.html).

*Table A-1. Listing of Installations Oversampled during the April 2007 Status of Forces Survey of Active-Duty Members and the Associated Local Market Characteristics Used in Our Analysis*

Locations	Privatized housing occupancy level	Privatized housing occupancy percent	School statistics	Crime statistics	Market vacancy
<b>Army</b>					
Ft. Rucker, AL	Low	83	Below	Low	No data
Ft. Carson, CO	High	93	Above	Low	High
Ft. Benning, GA	Low	71	No data	High	High
Schofield Bks, HI	Low	80	Above	High	Low
Ft. Campbell, KY	High	93	No data	Low	High
Ft. Meade, MD	Low	—	Above	High	Low
Ft. Leonard Wood, MO	Low	74	Above	Low	No data
Ft. Drum, NY	High	98	Below	Low	Low
Ft. Sill, OK	NA	—	Above	Low	Low
Ft. Bliss, TX	Low	89.90	No data	High	High
Ft. Hood, TX	High	97	Above	High	High
Ft. Belvoir, VA	High	96.10	Below	Low	Low
Ft. Lewis, WA	High	92.90	Below	High	Low
<b>Navy</b>					
San Diego Metro <sup>a</sup>	High	93	Above	Low	Low
Great Lakes Metro <sup>b</sup>	Low	62	Above	Low	Low
Norfolk Metro <sup>c</sup>	High	106	Below	High	Low
<b>Marine Corps</b>					
SD Metro (USMC) <sup>d</sup>	High	88	Above	Low	Low
MCB Camp Lejeune, NC	High	90	Below	High	Low
<b>Air Force</b>					
Elmendorf AFB, AK	High	98.90	No data	High	Low
Vandenberg AFB, CA	NA	—	Above	Low	Low
Scott AFB, IL	High	104	Above	High	Low
Hanscom AFB, MA	High	92.20	Above	Low	Low
Nellis AFB, NV	Low	80	Above	Low	Low
Kirtland AFB, NM	High	94	No data	High	Low
Wright-Patterson AFB, OH	Low	84	Above	Low	High
Lackland AFB, TX	High	96	Below	Low	High
Warren AFB, WY	NA	—	No data	Low	High

<sup>a</sup> San Diego Metro Area includes: NAVSTA San Diego CA, NAS North Island CA, NAVMEDCTR San Diego CA, NAB Coronado CA, and FLTASWTRNGCENPAC CA.

<sup>b</sup> Great Lakes Metro Area includes: SUBBASE New London CT, NAS Jacksonville FL, NTC Great Lakes IL, and NAVHOSP Great Lakes IL.

<sup>c</sup> Norfolk Metro Area includes: NAVWEPSTA Yorktown VA, NAVSHPYD Norfolk VA, NB Norfolk VA, NAB Little Creek VA, NAS Oceana VA, and NSGA Northwest VA.

<sup>d</sup> SD Metro (USMC) Area includes: MCB Camp Pendleton CA, MC Recruit Depot CA, and MCAS Miramar CA.

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## METHODOLOGY FOR ANALYZING THE DMDC SURVEY RESPONSES

The DMDC Status of Forces Survey conducted in April 2007 was administered to a large random sample (over 66,000) of active duty service members. Overall, the weighted response rate to the DMDC survey was 32 percent, a response rate similar to prior DMDC Status of Forces surveys. *The focus of our study was family housing for Service members with dependents (“families”).* Therefore DMDC, at the request of OSD, oversampled 29 CONUS installations with a significant number of privatized housing units in order for us to do deeper analysis at installations where privatized family housing was a meaningful choice for military families. In addition, we were interested to know if the findings were different at these locations compared to all CONUS installations. Accordingly, we filtered the total database of respondents into a subset for the purposes of our analysis.

The first filter was to limit our analysis dataset to those that were “eligible to respond, did respond, and had a permanent duty station within the 50 states and the District of Columbia.” The reason for this filter is that privatized family housing is not an option outside of these geographic locations, and we only wanted to analyze “eligible respondents” (not filled out by a spouse or other family member, not incarcerated, etc.). This filter resulted in a total number of eligible respondents to the survey stationed within the 50 states or District of Columbia of 17,173.

The second filter was to limit the analysis dataset to families, and to exclude geographic bachelors, because our study was focused on families living in family housing.<sup>2</sup> However, they were beyond the scope of our study, as were non-families. This filter resulted in a total number of 9,430 “eligible-responding families living in family housing and stationed in the 50 states or DC.” This was the primary dataset for our analysis. When we report “all installations,” our analysis is on these 9,430 respondents.

DMDC oversampled at 29 CONUS installations, named by OSD, in order for us to conduct deeper analysis that included non-survey data at installations where there were significant numbers of privatized family housing units available as choices to families. There were a total of 5,663 respondents living at these 20 installations. There were a total of 2,980 respondents living at these 29 installations. When we report “in the 29 installations,” our analysis is on these 2,980 respondents.

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<sup>2</sup>Geographic bachelors are service members who have dependents (spouses and/or children) who choose to live alone at their permanent duty station, i.e., they do not have their dependents living with them. Geographic bachelors are not eligible to live in MFH or privatized family housing, and could be living in bachelor’s quarters or in community housing. Therefore, our housing choice questions did not apply to the housing situation chosen by geographic bachelors.

In all of our analysis, we used the sampling weights provided by DMDC to ensure that representativeness of all attributes of the surveyed population were maintained. We do not report the margins of error for the percentages provided in this report. Depending on the survey question, the margins of error ranged from  $\pm 1$  percent to  $\pm 6$  percent and were usually between  $\pm 2$  to 3 percent. Therefore in the report, we do not call attention to differences by attribute (Service or Pay Grade) that are within this range.



## Appendix B

# Housing Questions from the 2007 Status of Forces Survey of Active Duty Members

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This appendix presents the housing related questionnaire from the 2007 Status of Forces Survey of active duty members conducted by DMDC. For our study, we used the results from demographic, financial, and housing questions contained in the 2007 survey instrument.





**April 2007 Status of Forces Survey of Active-Duty Members (As of 03-27-2007)**

<b>Base</b>		<b>Conditional</b>		<b>Alternate</b>
<b>ELIGIBILITY</b>				
<b>1. In what Service were you on active duty on DATE?</b> <input checked="" type="checkbox"/> Army <input checked="" type="checkbox"/> Navy <input checked="" type="checkbox"/> Marine Corps <input checked="" type="checkbox"/> Air Force <input checked="" type="checkbox"/> None, I have separated or retired				
<b>BACKGROUND INFORMATION</b>				
<b>2. Are you...?</b> <input checked="" type="checkbox"/> Male <input checked="" type="checkbox"/> Female				
<b>3. What is your current paygrade? <i>Mark one.</i></b> <input checked="" type="checkbox"/> E-1 <input checked="" type="checkbox"/> E-6 <input checked="" type="checkbox"/> W-1 <input checked="" type="checkbox"/> O-1/O-1E <input checked="" type="checkbox"/> E-2 <input checked="" type="checkbox"/> E-7 <input checked="" type="checkbox"/> W-2 <input checked="" type="checkbox"/> O-2/O-2E <input checked="" type="checkbox"/> E-3 <input checked="" type="checkbox"/> E-8 <input checked="" type="checkbox"/> W-3 <input checked="" type="checkbox"/> O-3/O-3E <input checked="" type="checkbox"/> E-4 <input checked="" type="checkbox"/> E-9 <input checked="" type="checkbox"/> W-4 <input checked="" type="checkbox"/> O-4 <input checked="" type="checkbox"/> E-5 <input checked="" type="checkbox"/> W-5 <input checked="" type="checkbox"/> O-5 <input checked="" type="checkbox"/> O-6 or above				
<b>4. What is your marital status?</b> <input checked="" type="checkbox"/> Married <input checked="" type="checkbox"/> Separated <input checked="" type="checkbox"/> Divorced <input checked="" type="checkbox"/> Widowed <input checked="" type="checkbox"/> Never married				

April 2007 Status of Forces Survey of Active-Duty Members (As of 03-27-2007)

Base	Conditional	Alternate
<p>For the next questions, the definition of “child, children, other legal dependents” includes anyone in your family, except your spouse, who has, or is eligible to have, a Uniformed Services Identification and Privilege card (also called a military ID card) or is eligible for military health care benefits, and is enrolled in the Defense Enrollment Eligibility Reporting System (DEERS).</p> <p>14. Do you have a child, children, or other legal dependents based on the definition above?</p> <p><input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>		

April 2007 Status of Forces Survey of Active-Duty Members (As of 03-27-2007)

Base	Conditional	Alternate
<p><b>22. Where is your permanent duty station (homeport) located?</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> In one of the 50 states, D.C., Puerto Rico, or a U.S. territory or possession</li> <li><input checked="" type="checkbox"/> Europe (e.g., Bosnia-Herzegovina, Germany, Italy, Serbia, United Kingdom)</li> <li><input checked="" type="checkbox"/> Former Soviet Union (e.g., Russia, Tajikistan, Uzbekistan)</li> <li><input checked="" type="checkbox"/> East Asia and Pacific (e.g., Australia, Japan, Korea)</li> <li><input checked="" type="checkbox"/> North Africa, Near East, or South Asia (e.g., Bahrain, Diego Garcia, Kuwait, Saudi Arabia)</li> <li><input checked="" type="checkbox"/> Sub-Saharan Africa (e.g., Kenya, South Africa)</li> <li><input checked="" type="checkbox"/> Western Hemisphere (e.g., Cuba, Honduras, Peru)</li> <li><input checked="" type="checkbox"/> Other or not sure</li> </ul>	<p>[Ask if Q22 = "In one of the 50 states, D.C., Puerto Rico, or a U.S. territory or possession"] Please select from the list below your permanent duty station location (homeport) within one of the 50 states, D.C., Puerto Rico, or a U.S. territory or possession.</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	

**April 2007 Status of Forces Survey of Active-Duty Members (As of 03-27-2007)**

Base	Conditional	Alternate
<p><b>23. Where do you live at your permanent duty station?</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Aboard ship</li> <li><input checked="" type="checkbox"/> Barracks/dorm/BEQ/UEPH/BOQ/UOPH military facility</li> <li><input checked="" type="checkbox"/> Military family housing, on base</li> <li><input checked="" type="checkbox"/> Military family housing, off base</li> <li><input checked="" type="checkbox"/> Privatized military housing that you rent on base</li> <li><input checked="" type="checkbox"/> Privatized military housing that you rent off base</li> <li><input checked="" type="checkbox"/> Community/civilian housing that you own or pay mortgage on</li> <li><input checked="" type="checkbox"/> Community/civilian housing that you rent</li> <li><input checked="" type="checkbox"/> Other</li> </ul>		<p>[Ask if Q22 = "Other or not sure"] Please enter the name of the country or installation.</p> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>
	<p>[Ask if Q23 = "Other"] Please specify where you live at your permanent duty station.</p> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>	

April 2007 Status of Forces Survey of Active-Duty Members (As of 03-27-2007)

Base	Conditional	Alternate
<p>The next questions ask about your income. (Answer only for yourself.)</p> <p><b>74. What were your total military gross earnings (i.e., before-tax) in 2006? (Please include all allowances, special pay, basic pay, and bonuses. Exclude spouse earnings.)</b></p> <p>You can enter an estimate for 2006 here:</p> <input data-bbox="418 1776 477 1969" type="text"/> <p>Or, if you prefer, you can enter a range here. My estimated total military earnings in 2006 were at least:</p> <input data-bbox="581 1776 639 1969" type="text"/> <p>but no more than:</p> <input data-bbox="672 1776 730 1969" type="text"/>		
<p><b>75. In 2006, how much income did you receive from the following sources: a second job; net gains or losses from sale of stocks, bonds, or real estate; interest income; dividends; child support/alimony; social security; welfare assistance; and net rent, trusts, and royalties from any other investments or business? (Exclude spouse earnings.)</b></p> <p>You can enter an estimate for 2006 here:</p> <input data-bbox="1003 1776 1062 1969" type="text"/> <p>Or if you prefer, enter a range here. My estimated income from other sources in 2006 was at least:</p> <input data-bbox="1149 1776 1208 1969" type="text"/> <p>but no more than:</p> <input data-bbox="1240 1776 1299 1969" type="text"/>		

April 2007 Status of Forces Survey of Active-Duty Members (As of 03-27-2007)

Base	Conditional	Alternate
	<p>76. [Ask if (Q4 = "Married" OR Q4 = "Separated") AND (Q6 = "Yes" OR Q7 = "Yes" OR Q9 = "Yes" OR Q10 = "Yes")] Does your spouse work less than 35 hours a week?</p> <p>Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/></p>	
	<p>The next few questions ask about income for your spouse.</p> <p>77. [Ask if (Q4 = "Married" OR Q4 = "Separated") AND (Q6 = "Yes" OR Q7 = "Yes" OR Q9 = "Yes" OR Q10 = "Yes")] What were your spouse's estimated total yearly gross earnings (i.e., before-tax) in 2006? (Please include bonuses, overtime, and income from a second job.)</p> <p>You can enter an estimate for 2006 here:</p> <p><input type="text"/></p> <p>Or, if you prefer, you can enter a range here. My spouse's estimated total gross earnings in 2006 were at least:</p> <p><input type="text"/></p> <p>but no more than:</p> <p><input type="text"/></p>	

April 2007 Status of Forces Survey of Active-Duty Members (As of 03-27-2007)

Base	Conditional	Alternate
	<p>78. [Ask if Q4 = "Married" OR Q4 = "Separated"] In 2006, how much income did your spouse receive from the following sources: net gains or losses from sale of stocks, bonds, or real estate; interest income; dividends; child support/alimony; social security; welfare assistance; and net rent, trusts, and royalties from any other investments or business? (<u>Exclude your earnings.</u>)  <i>You can enter an estimate for 2006 here:</i></p> <input data-bbox="488 1140 537 1335" type="text"/> <p><i>Or, if you prefer, you can enter a range here. My spouse's estimated income from other sources in 2006 was at least:</i></p> <input data-bbox="639 1140 688 1335" type="text"/> <p><i>but no more than:</i></p> <input data-bbox="732 1140 781 1335" type="text"/>	

April 2007 Status of Forces Survey of Active-Duty Members (As of 03-27-2007)

Base	Conditional	Alternate
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HOUSING		
<p>86. What is the zip code of your residence at your current permanent duty location?</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>		
	<p>87. [Ask if Q4 = "Married"] Are you considered a geographical bachelor (i.e., your family is living at a location other than your current permanent duty station)?</p> <p style="text-align: center;"> <input checked="" type="checkbox"/> Yes  <input checked="" type="checkbox"/> No                 </p>	



April 2007 Status of Forces Survey of Active-Duty Members (As of 03-27-2007)

Base	Conditional	Alternate
<p><b>88. What type of housing are you currently occupying at your <u>permanent duty location</u>?</b></p> <p><input checked="" type="checkbox"/> Single family home</p> <p><input checked="" type="checkbox"/> Duplex or townhouse (i.e., a one-family house attached to one or more houses)</p> <p><input checked="" type="checkbox"/> Apartment or condo (i.e., a building with two or more apartments)</p> <p><input checked="" type="checkbox"/> Barracks or dorm -- private bedroom</p> <p><input checked="" type="checkbox"/> Barracks or dorm -- shared bedroom</p> <p><input checked="" type="checkbox"/> Ship</p> <p><input checked="" type="checkbox"/> Mobile home</p> <p><input checked="" type="checkbox"/> Other</p>		
<p><b>89. How many bedrooms does this housing unit contain?</b></p> <p><input checked="" type="checkbox"/> None, it is an efficiency or studio</p> <p><input checked="" type="checkbox"/> One</p> <p><input checked="" type="checkbox"/> Two</p> <p><input checked="" type="checkbox"/> Three</p> <p><input checked="" type="checkbox"/> Four or more</p>		
<p><b>90. How far do you commute to work (one-way)?</b></p> <p><input checked="" type="checkbox"/> 0 - 20 miles</p> <p><input checked="" type="checkbox"/> 21 - 30 miles</p> <p><input checked="" type="checkbox"/> 31 - 50 miles</p> <p><input checked="" type="checkbox"/> More than 50 miles</p>		
<p><b>91. How long does it typically take you to commute to work (one-way)?</b></p> <p><input checked="" type="checkbox"/> 30 minutes or less</p> <p><input checked="" type="checkbox"/> 31 - 60 minutes</p> <p><input checked="" type="checkbox"/> 61 - 90 minutes</p> <p><input checked="" type="checkbox"/> More than 90 minutes</p>		

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Base	Conditional	Alternate
<p>93. <u>At your permanent duty location</u>, were you required to live in military housing (including privatized housing or a ship)?</p> <p><input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>92. [Ask if Q23 = "Military family housing on base" OR Q23 = "Military family housing off base" OR Q23 = "Privatized housing that you rent on base" OR Q23 = "Privatized housing that you rent off base"] <b>Which of the following best describes your military family housing or privatized housing that you rent?</b></p> <p><input checked="" type="checkbox"/> Built within last 5 years <input checked="" type="checkbox"/> Renovated within last 5 years <input checked="" type="checkbox"/> Not renovated within last 5 years <input checked="" type="checkbox"/> Not sure</p>	
	<p>94. [Ask if Q93 = "No"] <b>Which of the following best describes your first housing choice at your permanent duty location?</b></p> <p><input checked="" type="checkbox"/> Privatized military housing <input checked="" type="checkbox"/> Military housing <input checked="" type="checkbox"/> Community housing</p>	

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	<p>95. [Ask if (Q23 = "Community/civilian housing, own or pay mortgage on" OR Q23 = "Community/civilian housing, rent") AND Q93 = "No"] <b>Which of the following was the most important factor in your housing selection decision at your permanent duty location? Select one item from the list below.</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Military/privatized housing not available</li> <li><input checked="" type="checkbox"/> Affordability or to build equity</li> <li><input checked="" type="checkbox"/> Quality and condition of residence</li> <li><input checked="" type="checkbox"/> Wanting to live away from a military community</li> <li><input checked="" type="checkbox"/> Proximity to shopping, recreation, and services (e.g., child care, adult education)</li> <li><input checked="" type="checkbox"/> Time to commute to spouse's workplace</li> <li><input checked="" type="checkbox"/> Quality of schools for your child(ren)</li> <li><input checked="" type="checkbox"/> Quality of neighborhood</li> <li><input checked="" type="checkbox"/> Security and safety of the area</li> <li><input checked="" type="checkbox"/> Length of tour at permanent duty station</li> <li><input checked="" type="checkbox"/> Other</li> </ul>	<p>96. [Ask if (Q23 = "Military family housing, on base" OR Q23 = "Military family housing, off base" OR Q23 = "Privatized military housing that you rent on base" OR Q23 = "Privatized military housing that rent off base") AND Q93 = "No"] <b>Which of the following was the most important factor in your housing selection decision at your permanent duty location? Select one item from the list below.</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Community housing not available</li> <li><input checked="" type="checkbox"/> Affordability</li> <li><input checked="" type="checkbox"/> Quality and condition of residence</li> <li><input checked="" type="checkbox"/> Wanting to live in a military community</li> <li><input checked="" type="checkbox"/> Proximity to shopping, recreation, and services (e.g., child care, adult education)</li> <li><input checked="" type="checkbox"/> Time to commute to installation</li> <li><input checked="" type="checkbox"/> Quality of schools for your child(ren)</li> <li><input checked="" type="checkbox"/> Quality of neighborhood</li> <li><input checked="" type="checkbox"/> Security and safety of the area</li> <li><input checked="" type="checkbox"/> Length of tour at permanent duty station</li> <li><input checked="" type="checkbox"/> Other</li> </ul>
	<p>[Ask if (Q23 = "Community/civilian housing, own or pay mortgage on" OR Q23 = "Community/civilian housing, rent") AND Q93 = "No" AND Q95 = "Other"] <b>Please specify the most important factor in your housing selection decision at your permanent duty location.</b></p> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>	<p>[Ask if (Q23 = "Military family housing, on base" OR Q23 = "Military family housing, off base" OR Q23 = "Privatized military housing that you rent on base" OR Q23 = "Privatized military housing that you rent off base") AND Q93 = "No" AND Q96 = "Other"] <b>Please specify the most important factor in your housing selection decision at your permanent duty location.</b></p> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>

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	<p>97. [Ask if (Q23 = "Community/civilian housing, own or pay mortgage on" OR Q23 = "Community/civilian housing, rent") AND Q93 = "No"] <b>Which of the following was the <u>second most important factor in your housing selection decision at your permanent duty location?</u> Select one item from the list below.</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Military/privatized housing not available</li> <li><input checked="" type="checkbox"/> Affordability or to build equity</li> <li><input checked="" type="checkbox"/> Quality and condition of residence</li> <li><input checked="" type="checkbox"/> Wanting to live away from a military community</li> <li><input checked="" type="checkbox"/> Proximity to shopping, recreation, and services (e.g., child care, adult education)</li> <li><input checked="" type="checkbox"/> Time to commute to spouse's workplace</li> <li><input checked="" type="checkbox"/> Quality of schools for your child(ren)</li> <li><input checked="" type="checkbox"/> Quality of neighborhood</li> <li><input checked="" type="checkbox"/> Security and safety of the area</li> <li><input checked="" type="checkbox"/> Length of tour at permanent duty station</li> <li><input checked="" type="checkbox"/> Other</li> </ul>	<p>98. [Ask if (Q23 = "Military family housing, on base" OR Q23 = "Military family housing, off base" OR Q23 = "Privatized military housing that you rent on base" OR Q23 = "Privatized military housing that rent off base") AND Q93 = "No"] <b>Which of the following was the <u>second most important factor in your housing selection decision at your permanent duty location?</u> Select one item from the list below.</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Community housing not available</li> <li><input checked="" type="checkbox"/> Affordability</li> <li><input checked="" type="checkbox"/> Quality and condition of residence</li> <li><input checked="" type="checkbox"/> Wanting to live in a military community</li> <li><input checked="" type="checkbox"/> Proximity to shopping, recreation, and services (e.g., child care, adult education)</li> <li><input checked="" type="checkbox"/> Time to commute to installation</li> <li><input checked="" type="checkbox"/> Quality of schools for your child(ren)</li> <li><input checked="" type="checkbox"/> Quality of neighborhood</li> <li><input checked="" type="checkbox"/> Security and safety of the area</li> <li><input checked="" type="checkbox"/> Length of tour at permanent duty station</li> <li><input checked="" type="checkbox"/> Other</li> </ul>
	<p>[Ask if (Q23 = "Community/civilian housing, own or pay mortgage on" OR Q23 = "Community/civilian housing, rent") AND Q93 = "No" AND Q97 = "Other"] <b>Please specify the <u>second most important factor in your housing selection decision at your permanent duty location.</u></b></p> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>	<p>[Ask if (Q23 = "Military family housing, on base" OR Q23 = "Military family housing, off base" OR Q23 = "Privatized military housing that you rent on base" OR Q23 = "Privatized military housing that you rent off base") AND Q93 = "No" AND Q98 = "Other"] <b>Please specify the <u>second most important factor in your housing selection decision at your permanent duty location.</u></b></p> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>

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	<p>99. [Ask if (Q23 = "Community/civilian housing, own or pay mortgage on" OR Q23 = "Community/civilian housing, rent") AND Q93 = "No"] <b>Which of the following was the third most important factor in your housing selection decision at your permanent duty location? Select one item from the list below.</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Military/privatized housing not available</li> <li><input checked="" type="checkbox"/> Affordability or to build equity</li> <li><input checked="" type="checkbox"/> Quality and condition of residence</li> <li><input checked="" type="checkbox"/> Wanting to live away from a military community</li> <li><input checked="" type="checkbox"/> Proximity to shopping, recreation, and services (e.g., child care, adult education)</li> <li><input checked="" type="checkbox"/> Time to commute to spouse's workplace</li> <li><input checked="" type="checkbox"/> Quality of schools for your child(ren)</li> <li><input checked="" type="checkbox"/> Quality of neighborhood</li> <li><input checked="" type="checkbox"/> Security and safety of the area</li> <li><input checked="" type="checkbox"/> Length of tour at permanent duty station</li> <li><input checked="" type="checkbox"/> Other</li> </ul>	<p>100. [Ask if (Q23 = "Military family housing, on base" OR Q23 = "Military family housing, off base" OR Q23 = "Privatized military housing that you rent on base" OR Q23 = "Privatized military housing that rent off base") AND Q93 = "No"] <b>Which of the following was the third most important factor in your housing selection decision at your permanent duty location? Select one item from the list below.</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Community housing not available</li> <li><input checked="" type="checkbox"/> Affordability</li> <li><input checked="" type="checkbox"/> Quality and condition of residence</li> <li><input checked="" type="checkbox"/> Wanting to live in a military community</li> <li><input checked="" type="checkbox"/> Proximity to shopping, recreation, and services (e.g., child care, adult education)</li> <li><input checked="" type="checkbox"/> Time to commute to installation</li> <li><input checked="" type="checkbox"/> Quality of schools for your child(ren)</li> <li><input checked="" type="checkbox"/> Quality of neighborhood</li> <li><input checked="" type="checkbox"/> Security and safety of the area</li> <li><input checked="" type="checkbox"/> Length of tour at permanent duty station</li> <li><input checked="" type="checkbox"/> Other</li> </ul>

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Base	Conditional	Alternate
	<p>[Ask if (Q23 = "Community/civilian housing, own or pay mortgage on" OR Q23 = "Community/civilian housing, rent") AND Q93 = "No" AND Q99 = "Other"]  <b>Please specify the <u>third most important factor in your housing selection decision at your permanent duty location.</u></b></p> <div data-bbox="402 793 488 1312" style="border: 1px solid black; height: 247px; width: 53px;"></div>	<p>[Ask if (Q23 = "Military family housing, on base" OR Q23 = "Military family housing, off base" OR Q23 = "Privatized military housing that you rent on base" OR Q23 = "Privatized military housing that you rent off base") AND Q93 = "No" AND Q100 = "Other"]  <b>Please specify the <u>third most important factor in your housing selection decision at your permanent duty location.</u></b></p> <div data-bbox="462 157 548 676" style="border: 1px solid black; height: 247px; width: 53px;"></div>

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<p><b>101. How satisfied are you with the following characteristics of your current residence and community at your permanent duty station?</b></p> <table border="1"> <thead> <tr> <th></th> <th>Very satisfied</th> <th>Satisfied</th> <th>Neither satisfied nor dissatisfied</th> <th>Dissatisfied</th> <th>Very dissatisfied</th> <th>Not applicable</th> </tr> </thead> <tbody> <tr> <td>a. Choice of housing options .....</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>b. 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<p><b>102. What is your monthly rent or mortgage payment?</b>  <i>If you live in military-provided housing and you do not pay rent, enter "0".</i></p> <div style="border: 1px solid black; width: 100px; height: 20px; margin-bottom: 5px;"></div> <p style="text-align: right;">Dollars</p>																																																																								

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<p><b>103. What is your typical monthly expenditure on the following? If utilities are included in your rent or you have other living arrangements where you do not pay utilities, enter "0".</b></p> <p>a. Water and sewerage <input type="text"/></p> <p>b. Electricity <input type="text"/></p> <p>c. Heat/gas or heating oil <input type="text"/></p>																																
<p><b>104. Did you obtain any of the following housing information to help you decide where to live at your permanent duty station?</b></p> <table border="1"> <thead> <tr> <th></th> <th>No</th> <th>Yes</th> </tr> </thead> <tbody> <tr> <td>a. Listing of privatized rental units (on or off base).....</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>b. Listing of DoD owned units.....</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>c. Listing of community rental units.....</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>d. Listing of homes for sale.....</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>e. Quality of certain neighborhoods or schools.....</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>f. Advice on renting/leasing (e.g., military clauses, security deposits, Basic Allowance for Housing (BAH) allotment).....</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>g. Advice of buying or selling a home (e.g., finding an agent/broker, financing).....</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>h. Temporary lodging and/or storage of household goods.....</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>i. Other.....</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </tbody> </table>		No	Yes	a. Listing of privatized rental units (on or off base).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Listing of DoD owned units.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Listing of community rental units.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Listing of homes for sale.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Quality of certain neighborhoods or schools.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. Advice on renting/leasing (e.g., military clauses, security deposits, Basic Allowance for Housing (BAH) allotment).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. Advice of buying or selling a home (e.g., finding an agent/broker, financing).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	h. Temporary lodging and/or storage of household goods.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	i. Other.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
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Base	Conditional	Alternate																											
	<p>[Ask if Q104 i = "Yes"] Please specify what housing information you obtained to help you decide where to live at your permanent duty station.</p>																												
<p><b>105.</b></p>	<p>[Ask if Q104 a = "Yes" OR Q104 b = "Yes" OR Q104 c = "Yes" OR Q104 d = "Yes" OR Q104 e = "Yes" OR Q104 f = "Yes" OR Q104 g = "Yes" OR Q104 h = "Yes" OR Q104 i = "Yes"] Did you obtain housing information from any of the following sources?</p> <table border="1"> <thead> <tr> <th></th> <th>No</th> <th>Yes</th> </tr> </thead> <tbody> <tr> <td>a. Military Housing Office - in person, telephone, or e-mail.....</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>b. DoD Web site - Automated Housing Referral Network (AHRN).....</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>c. Army Web site - Housing Operations Management System (HOMES).....</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>d. Navy Web site - Electronic Navy Housing (eNH).....</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>e. Air Force Web site - Automated Civil Engineer System-Housing Module (ACES-HM).....</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>f. Private sector Web sites (e.g., militarybyowner.com, real estate brokers, craigslist.com).....</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>g. Print media (e.g., newspapers, magazines, brochures).....</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>h. Other.....</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </tbody> </table>		No	Yes	a. Military Housing Office - in person, telephone, or e-mail.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. DoD Web site - Automated Housing Referral Network (AHRN).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Army Web site - Housing Operations Management System (HOMES).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Navy Web site - Electronic Navy Housing (eNH).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Air Force Web site - Automated Civil Engineer System-Housing Module (ACES-HM).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. Private sector Web sites (e.g., militarybyowner.com, real estate brokers, craigslist.com).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. Print media (e.g., newspapers, magazines, brochures).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	h. Other.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	No	Yes																											
a. Military Housing Office - in person, telephone, or e-mail.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>																											
b. DoD Web site - Automated Housing Referral Network (AHRN).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>																											
c. Army Web site - Housing Operations Management System (HOMES).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>																											
d. Navy Web site - Electronic Navy Housing (eNH).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>																											
e. Air Force Web site - Automated Civil Engineer System-Housing Module (ACES-HM).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>																											
f. Private sector Web sites (e.g., militarybyowner.com, real estate brokers, craigslist.com).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>																											
g. Print media (e.g., newspapers, magazines, brochures).....	<input type="checkbox"/>	<input checked="" type="checkbox"/>																											
h. Other.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>																											
	<p>[Ask if Q105 h = "Yes"] Please specify where you obtained housing information.</p>																												

April 2007 Status of Forces Survey of Active-Duty Members (As of 03-27-2007)

Base	Conditional	Alternate
	<p>106. [Ask if Q105 a = "Yes" OR Q105 b = "Yes" OR Q105 c = "Yes" OR Q105 d = "Yes" OR Q105 e = "Yes"] How satisfied were you with the usefulness of the information you received from either the Military Housing Office or a military Web site?</p> <p> <input checked="" type="checkbox"/> Very satisfied  <input checked="" type="checkbox"/> Somewhat satisfied  <input checked="" type="checkbox"/> Neither satisfied nor dissatisfied  <input checked="" type="checkbox"/> Somewhat dissatisfied  <input checked="" type="checkbox"/> Very dissatisfied                 </p>	

# Appendix C

## Literature Review

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This appendix presents a summary of some key articles and reports published regarding family housing and housing choices.

### DEPARTMENT OF DEFENSE SURVEYS

#### DMDC Status of Forces Survey of Active Duty Members

Every odd year, the DMDC conducts the Status of Forces Survey of active duty members. This survey asks service members a series of questions pertaining to military life. One set of questions asks service members how satisfied they are with housing. Below we review the results from the July 2003, August 2005, and April 2007 Status of Forces Surveys. DMDC's survey instruments for 2003, 2005, and 2009 (draft) and summary survey results briefing for 2003 and are shown in Appendix G. The DMDC 2007 survey instrument is shown in Appendix B.

#### JULY 2003 DMDC STATUS OF FORCES SURVEY

In July 2003, the survey asked respondents how satisfied they were with 15 characteristics of their residence and community. When asked about satisfaction with their housing in general, 69 percent indicated they were either satisfied or very satisfied. Another 20 percent indicated they were neither satisfied nor dissatisfied and only 21 percent indicated they were dissatisfied or very dissatisfied with their housing in general. Responders were most satisfied with the distance to work, safety of the area, and distance to health care. They were least satisfied with traffic congestion, amount of livable space in residence, and privacy. The results of the July 2003 DMDC survey are presented in Figure C-1. Additional detailed statistics were provided by DMDC for various characteristics of respondents (e.g., rank categories, living on versus off base, by service etc.). See Table C-1. We note the following observations regarding satisfaction with housing in general from the DMDC summary:

- ◆ A higher percentage of Navy and Air Force respondents (63 and 66 percent respectively) were satisfied than the Army and Marine Corps (53 and 52 percent respectively).
- ◆ A lower percentage of service members ranked E1-E4 were satisfied (46) than other pay grades (64 percent for E5-E9; 77 percent for O1-O3; and 78 percent for O4-O6).

- ◆ For all services, a lower percentage of enlisted respondents were satisfied compared to the officer respondents.
- ◆ Sixty-one percent of U.S.-based respondents were satisfied while only 56 percent of overseas respondents were satisfied.
- ◆ A significantly higher percentage of responders living off base were satisfied with housing (73 percent) compared to those living on-base (40 percent).
- ◆ A lower percentage of single responders without children were satisfied with housing (49 percent) compared to singles with children, married with children, and married without children (60, 64, and 66 percent respectively).

Figure C-1. Summary of Results from the July 2003 DMDC Status of Forces Survey (Question 57 Satisfaction with Residence and Community)

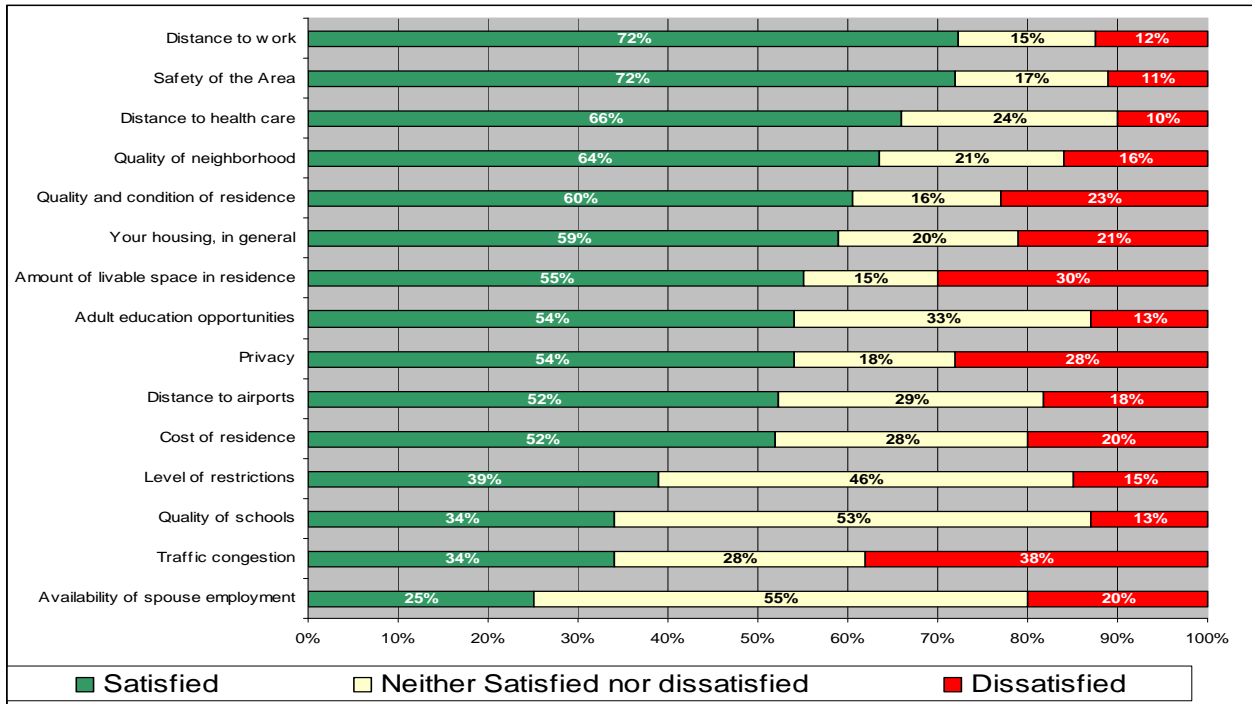


Table C-1. Detailed of Results from the July 2003 DMDC Status of Forces Survey  
(Question 57 Satisfaction with Residence and Community)

		Total	Army	Navy	Marine Corps	Air Force	E1-E4	E5-E9	O1-O3	O4-O6	Army Enlisted	Army Officers	Navy Enlisted	Navy Officers	Marine Corps Enlisted	Marine Corps Officers	Air Force Enlisted	Air Force Officers	US Based	Overseas	On-base	Off-base	Single w/ Children	Single w/o Children	Married w/ Children	Married w/o Children
Your housing, in general	Sat	59	53	63	52	66	46	64	77	78	50	70	61	77	49	75	62	81	61	50	40	59	60	49	64	66
	Dis	21	27	17	25	15	28	18	10	11	30	14	18	10	27	12	16	8	20	24	34	22	21	26	19	15
Distance to work	Sat	72	74	70	72	73	72	72	74	70	74	71	69	72	73	69	73	73	72	71	76	70	75	72	72	73
	Dis	12	10	9	8	11	8	11	11	17	9	13	12	15	9	14	10	13	11	10	7	10	7	7	8	10
Safety of the Area	Sat	72	69	71	68	79	64	74	83	87	67	81	68	87	66	84	76	86	72	72	69	72	70	67	76	75
	Dis	11	12	12	10	8	13	11	6	5	13	1	13	5	10	6	9	5	11	9	10	11	11	11	10	11
Distance to health care	Sat	66	68	68	62	64	64	68	67	70	68	67	68	70	62	63	63	68	68	59	66	65	71	62	69	65
	Dis	10	10	9	8	11	8	11	10	13	9	13	9	11	8	12	11	12	11	9	10	7	7	7	12	11
Quality of neighborhood	Sat	64	58	65	56	73	51	69	79	84	54	76	63	82	53	81	70	82	65	56	49	63	64	53	71	69
	Dis	16	18	16	16	13	20	15	8	5	20	8	18	7	17	7	14	6	16	17	21	17	17	18	14	15
Quality and condition of residence	Sat	60	55	64	56	66	49	65	76	78	51	71	61	80	54	74	63	80	62	54	44	60	60	54	64	67
	Dis	23	29	19	27	19	30	21	13	12	31	16	21	10	29	14	21	11	22	28	37	24	26	37	22	17
Amount of livable space in residence	Sat	55	51	58	48	60	43	59	73	70	47	48	55	71	46	67	56	76	57	46	46	55	55	45	59	64
	Dis	30	34	27	35	26	38	27	16	20	37	20	28	18	36	20	39	17	28	39	37	30	28	37	27	22
Adult education opportunities	Sat	54	52	52	55	59	53	59	45	44	54	43	52	49	56	44	63	44	56	46	52	52	65	53	54	54
	Dis	13	16	12	15	8	16	10	15	8	16	14	13	9	14	10	8	11	11	20	16	15	9	15	11	13
Privacy	Sat	54	49	58	46	61	39	61	72	76	45	70	55	76	43	70	58	75	57	43	32	54	58	43	61	61
	Dis	28	34	23	37	21	41	23	12	11	39	14	25	11	39	13	24	11	26	28	48	29	26	37	22	23
Distance to airports	Sat	52	50	59	43	54	45	55	61	63	48	59	58	64	41	54	52	63	56	37	45	53	59	49	54	52
	Dis	18	19	16	22	17	21	17	17	15	20	16	16	16	22	20	17	17	17	23	21	18	14	19	18	19
Cost of residence	Sat	52	51	51	48	55	49	52	60	53	50	54	51	55	47	54	53	61	52	50	50	52	51	49	52	55
	Dis	20	18	25	19	20	15	24	21	27	17	22	25	26	19	25	19	22	22	13	9	21	23	17	23	21
Level of restrictions	Sat	39	40	39	32	42	30	43	47	54	38	48	38	49	30	45	39	52	41	32	30	38	45	29	46	41
	Dis	15	17	15	16	14	18	15	9	10	18	10	16	10	17	9	15	8	15	18	22	17	14	15	16	15
Quality of schools	Sat	34	35	35	28	36	24	42	29	48	34	37	34	37	27	34	36	39	36	27	28	31	51	20	49	25
	Dis	13	12	13	13	13	10	15	13	16	12	13	13	17	12	18	12	15	14	8	11	14	14	7	19	9
Traffic congestion	Sat	34	35	29	27	41	29	35	45	43	33	44	28	37	26	35	39	49	34	32	34	33	36	32	37	30
	Dis	38	35	46	40	32	35	41	33	40	36	33	46	45	40	44	31	33	40	30	30	40	37	34	39	42
Availability of spouse employment	Sat	25	22	28	23	26	18	30	27	32	21	26	27	34	22	28	26	29	27	17	17	24	21	13	32	31
	Dis	20	23	16	20	20	16	23	20	18	23	23	16	19	20	22	20	17	20	20	19	20	9	6	29	28

## AUGUST 2005 DMDC STATUS OF FORCES SURVEY

In August 2005, DMDC again asked survey respondents how satisfied they were with 13 characteristics of their residence and community. When asked about satisfaction with their housing in general, 63 percent indicated they were either satisfied or very satisfied (compared to the 69 percent satisfied in the 2003 study). Another 17 percent indicated they were neither satisfied nor dissatisfied and only 19 percent indicated they were dissatisfied or very dissatisfied with their housing in general (less than the 21 percent dissatisfied or very dissatisfied in the 2003 survey). Like the 2003 survey, responders of the 2005 survey were most satisfied with the distance to work, safety of the area, and distance to health care. They were least satisfied with traffic congestion, cost of residence, and availability of spouse employment. The results of the July 2005 DMDC survey are presented in Figure C-2. Additional detailed statistics were provided by DMDC for various characteristics of respondents (e.g., rank categories, living on versus off base, by service etc). See Table C-2.

Figure C-2 Summary of Results from the July 2005 DMDC Status of Forces Survey  
(Question 51 Satisfaction with Residence and Community)

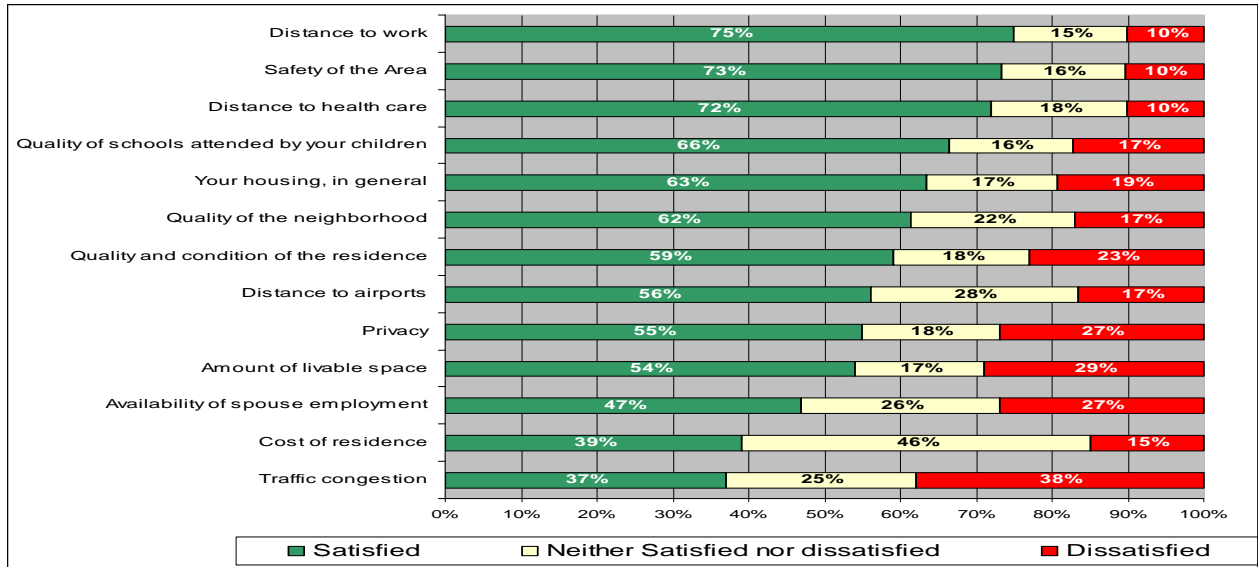


Table C-2. Detailed of Results from the July 2005 DMDC Status of Forces Survey  
(Question 51 Satisfaction with Residence and Community)

		Total	Army	Navy	Marine Corps	Air Force	E1-E4	E5-E9	O1-O3	O4-O6	Army Enlisted	Army Officers	Navy Enlisted	Navy Officers	Marine Corps Enlisted	Marine Corps Officers	Air Force Enlisted	Air Force Officers	US Based	Overseas	On-base	Off-base	Single w/ Children	Single w/o Children	Married w/ Children	Married w/o Children	
			<b>Your housing, in general</b>	Sat	36	59	68	53	70	51	68	81	79	55	76	65	83	51	76	67	81	64	59	45	74	66	53
	Dis	19	22	16	25	16	26	17	9	10	25	12	17	9	27	11	18	9	19	20	34	11	16	25	17	15	
Distance to work	Sat	75	76	72	74	77	74	75	77	73	76	77	72	73	74	72	78	76	75	77	75	77	81	72	75	76	74
	Dis	10	9	13	11	9	8	11	11	16	9	12	12	14	10	18	8	12	11	9	6	13	10	8	12	12	
Safety of the Area	Sat	73	70	73	74	78	64	77	84	87	67	83	71	84	72	86	75	87	73	74	71	74	74	68	78	71	
	Dis	10	12	11	10	9	14	9	6	5	13	6	12	7	10	5	10	4	11	7	10	11	9	11	9	13	
Distance to health care	Sat	72	73	73	72	72	70	74	75	76	72	75	72	75	72	72	71	76	73	70	74	71	73	69	74	73	
	Dis	10	9	10	9	11	8	11	10	12	9	10	10	12	8	12	11	11	9	12	8	11	10	7	11	10	
Quality of schools attended by your children	Sat	66	64	67	66	70	57	67	65	73	64	65	66	70	67	64	68	74	67	65	62	68	58	NA	67	NA	
	Dis	17	16	18	18	17	17	17	21	14	16	17	18	17	16	24	18	15	17	15	18	17	20	NA	17	NA	
Quality of the neighborhood	Sat	62	57	65	52	67	46	67	79	82	53	76	62	81	49	80	63	83	62	58	45	70	59	50	70	62	
	Dis	17	19	15	20	13	23	15	9	7	21	10	16	9	21	9	15	5	16	18	24	13	16	19	14	18	
Quality and condition of residence	Sat	59	54	63	50	66	45	64	75	78	51	71	60	78	47	73	63	78	60	55	40	70	59	50	66	60	
	Dis	32	27	18	30	18	31	20	13	13	29	15	20	11	33	15	20	12	22	26	38	14	25	28	19	21	
Distance to airports	Sat	56	54	58	47	60	48	58	64	69	51	65	56	66	46	59	58	68	59	38	47	60	53	51	59	57	
	Dis	17	18	15	19	16	18	16	16	12	18	13	14	16	19	21	17	13	15	24	18	16	15	17	16	19	
Privacy	Sat	55	51	58	43	61	39	61	74	75	48	70	55	77	40	72	57	77	56	48	31	68	58	42	62	60	
	Dis	27	30	23	37	22	40	22	11	12	33	16	25	10	40	12	25	9	25	35	48	15	26	38	21	21	
Amount of livable space	Sat	54	50	57	44	59	42	57	71	70	47	66	54	73	41	68	56	72	55	46	33	65	50	43	59	59	
	Dis	29	32	25	37	26	36	27	17	21	34	22	26	17	39	21	28	18	28	36	46	20	32	35	27	24	
Availability of spouse employment	Sat	47	39	49	46	55	41	48	47	55	37	47	48	53	45	54	56	51	48	36	37	50	NA	NA	47	45	
	Dis	27	34	24	31	20	33	27	17	17	36	25	25	22	32	24	20	21	26	35	34	25	NA	NA	26	30	
Cost of residence	Sat	43	42	41	39	49	39	43	53	50	40	50	39	48	37	48	48	54	43	48	42	44	42	41	45	44	
	Dis	33	32	36	36	32	29	36	32	36	32	32	36	37	36	36	31	32	35	21	24	37	37	27	36	35	
Traffic congestion	Sat	37	35	33	33	45	30	39	49	44	32	46	31	43	32	43	43	51	36	38	36	37	38	30	42	36	
	Dis	38	38	34	39	33	37	40	31	41	38	36	44	41	39	39	33	31	40	30	31	42	40	38	37	41	

We note the following observations regarding satisfaction with housing in general from the DMDC summary of 2005 responses:

- ◆ A higher percentage of Navy and Air Force respondents (68 and 70 percent respectively) were satisfied than the Army and Marine Corps (59 and 53 percent respectively).
- ◆ A lower percentage of service members ranked E1-E4 were satisfied (51) than other pay grades (68 percent for E5-E9; 81 percent for O1-O3; and 79 percent for O4-O6).
- ◆ For all services, a lower percentage of enlisted respondents were satisfied compared to the officer respondents.
- ◆ Sixty-four percent of U.S.-based respondents were satisfied while only 59 percent of overseas respondents were satisfied.
- ◆ A significantly higher percentage of responders living off base were satisfied with housing (74 percent) compared to those living on-base (45 percent).
- ◆ A lower percentage of single responders without children were satisfied with housing (53 percent) compared to singles with children, married with children, and married without children (66, 69, and 66 percent respectively).

#### APRIL 2007 DMDC STATUS OF FORCES SURVEY

The 2007 DMDC survey questions regarding satisfaction were modified from the 2005 survey, asking participants to respond to 9 satisfaction factors (6 repeat factors—safety, neighborhood, schools, housing quality, affordability, and commute, and 2 new factors—parking and housing choices), compared to 15 factors in 2003 and 13 factors in 2005:

- ◆ The 2007 survey shows double digit increases in satisfaction with the quality of neighborhoods, schools, and housing.
- ◆ Satisfaction with safety increased 7 percent over 2003 and 6 percent over 2005.
- ◆ Affordability showed a 16 percent increase in satisfaction over 2003 and a 3 percent increase over 2005.
- ◆ The base and spouse commute (comparable to the distance to work factor in the 2003 and 2005 surveys) showed a slight decrease in satisfaction. However, at least 95 percent of respondents to the 2007 survey lived within 30 miles and/or 60 minutes of the base.

- ◆ The new factors in the 2007 survey question, parking and choice of housing options, showed satisfaction levels of 78 and 69 respectively.

Overall, satisfaction was higher in the 2007 survey than in the 2003 or 2005 survey. Detailed and summary results are shown in Figure C-3 and Table C-3.

Figure C-3. Summary Results from the April 2007 DMDC Status of Forces Survey (Question 101 Satisfaction with Residence and Community)

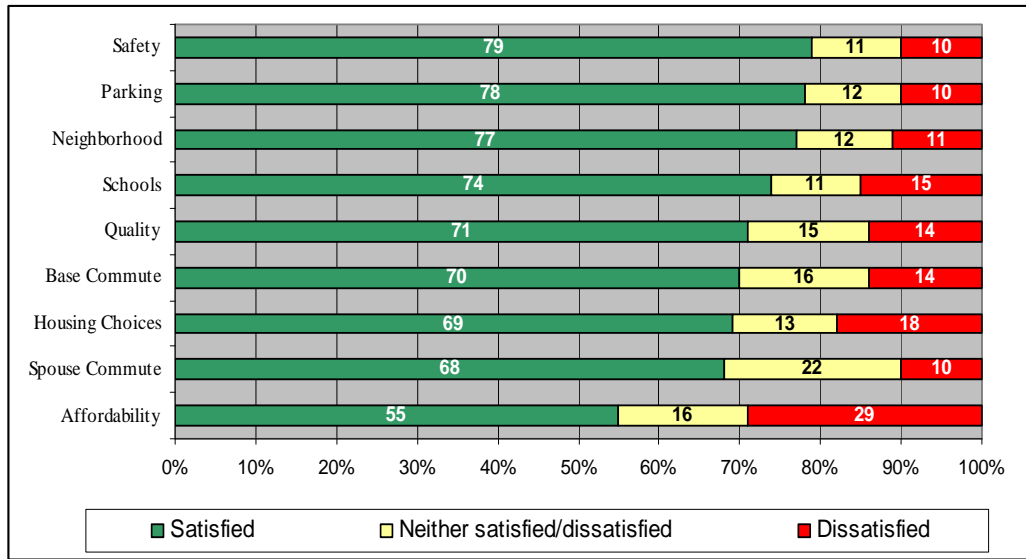


Table C-3. Detailed of Results from the April 2007 DMDC Status of Forces Survey (Question 101 Satisfaction with Residence and Community)

		Total	Army	Navy	Marine Corps	Air Force	E1-E4	E5-E6	E7-up
<b>Safety</b>	Sat	79	74	84	84	84	64	74	90
	Dis	10	13	7	5	7	17	13	4
<b>Parking</b>	Sat	78	79	77	74	75	62	75	86
	Dis	10	9	11	9	13	20	11	6
<b>Neighborhood</b>	Sat	77	71	81	83	84	65	71	88
	Dis	11	15	7	4	7	20	13	5
<b>Schools</b>	Sat	74	67	84	80	75	50	72	84
	Dis	15	20	10	11	12	28	15	11
<b>Quality</b>	Sat	71	65	78	67	75	53	68	79
	Dis	14	18	10	16	8	15	18	8
<b>Base Commute</b>	Sat	70	77	60	60	71	64	71	71
	Dis	14	8	24	13	13	7	13	17
<b>Choices</b>	Sat	69	66	76	62	64	51	62	81
	Dis	18	21	14	18	16	25	23	10
<b>Spouse Commute</b>	Sat	68	71	64	65	69	54	69	71
	Dis	10	8	13	8	11	4	11	10
<b>Affordability</b>	Sat	55	59	50	51	55	53	55	56
	Dis	29	24	37	27	30	32	28	31



## Privatized Housing Surveys

### MHPI PROGRAM EVALUATION PLAN PROJECT MONITORING MATRIX

Twice a year, the Services compile a summary of each MHPI project known as the PEP. The PEP contains two parts—the Project Fact Sheet and the Project Monitoring Matrix. The Fact Sheet indicates project scope and structure at the time of project award or following the approval of a new scoring report for the project. Information in this portion of the PEP includes information such as the location and size of the project, the financial profile of the project, baseline milestones and timelines of the project, government services and developer amenities, and other information pertaining to the project as awarded.

The Monitoring Matrix portion of the PEP is updated semi-annually and tracks the progress and performance of the project. This portion of the report includes status updates on the project's construction schedule, financial health of the project (i.e., loan activity, debt coverage ratio, Government's return on investment, and replacement reserves), project occupancy, physical condition assessment, incident reports, and tenant surveys.

The PEP requires that each service ask residents in privatized housing if the resident would recommend privatized housing. Responses are separated into those living in newly constructed units, those living in revitalized (or renovated) units, and those living in unimproved units. The results from the 2006, 2007, and 2008 PEP reports are presented in Figures C-4 through C-6.

*Figure C-4. Results of the 2006 Tenant Satisfaction Question for the PEP Report, "Would You Recommend Privatized Housing?"*

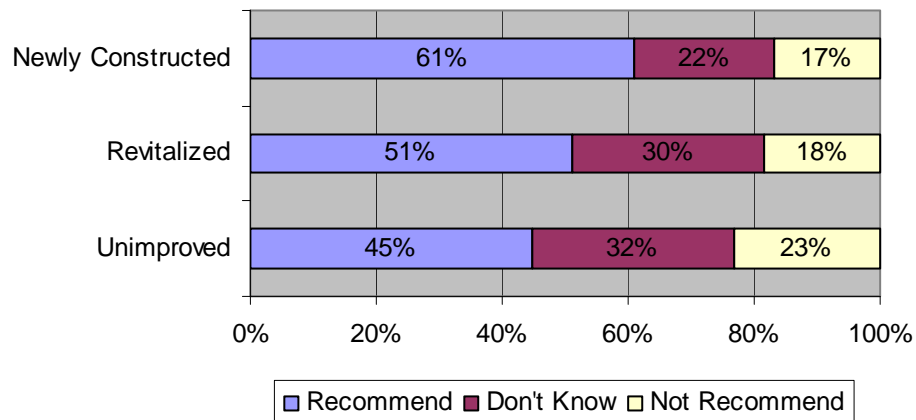


Figure C-5. Results of the 2007 Tenant Satisfaction Question for the PEP Report, "Would You Recommend Privatized Housing?"

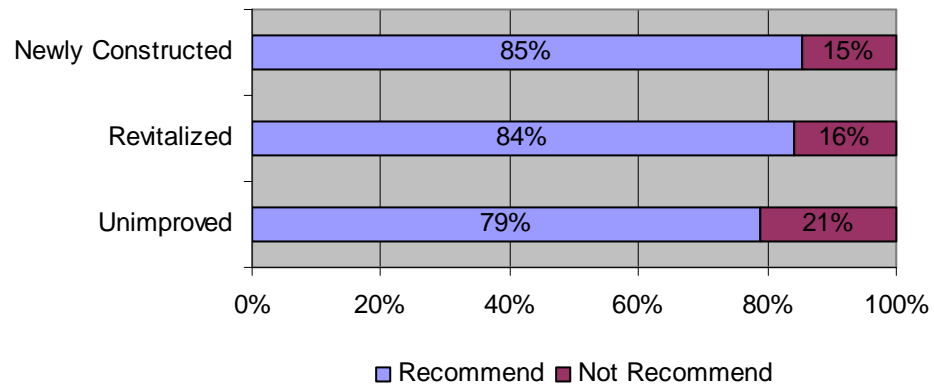
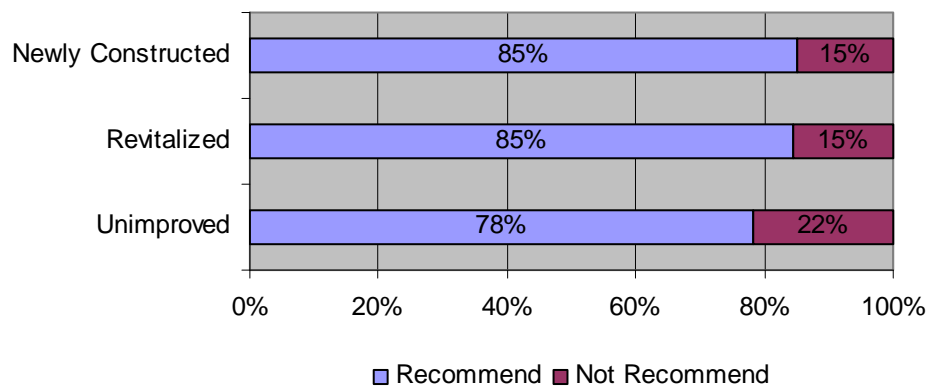


Figure C-6. Results of the 2008 Tenant Satisfaction Question for the PEP Report, "Would You Recommend Privatized Housing?"



## SERVICE HOUSING SURVEYS FOR PRIVATIZED HOUSING

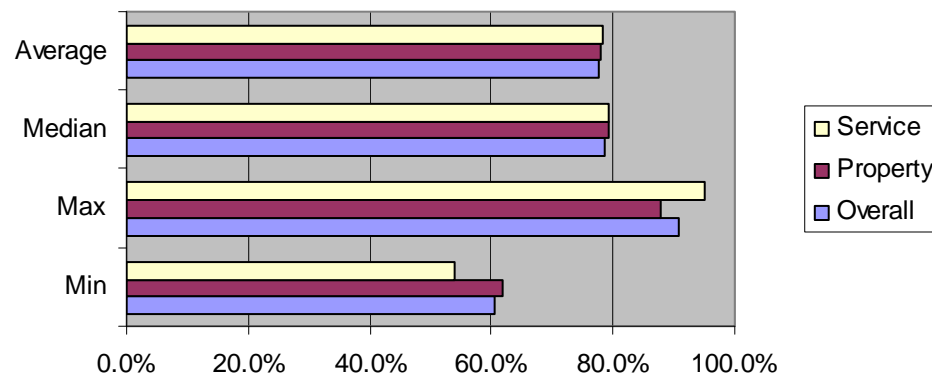
Each service conducts a survey to assess how satisfied residents of privatized housing are with quality and condition of their home, their neighborhood, and the services provided by the property management firm. Both the Air Force and the Navy use the REACT residential property survey developed by CEL and Associates. The CEL survey used by the Air Force and Navy is based on the resident survey instrument that CEL has used successfully for many other residential communities managed by many of the leading property management firms. The REACT survey is very detailed and covers the service member's satisfaction with all aspects of both the physical condition of the property and services provided by management. Separate customer satisfaction scores are derived for each question, as well as overall satisfaction, property satisfaction, and service satisfaction. The property and service factors rated by residents are as follows:

- ◆ Readiness to solve problems
- ◆ Responsiveness and follow-through

- ◆ Property appearance and condition
- ◆ Quality of management services
- ◆ Quality of leasing
- ◆ Quality of maintenance
- ◆ Property rating
- ◆ Relationship rating
- ◆ Renewal intention.

The December, 2008 satisfaction score ranges, medians, and averages for the 68 Navy properties with 10 or more survey responses are shown in Figure C-7.

*Figure C-7. December 2008 Navy PPV Property Satisfaction Ratings from the REACT Survey, Properties with 10 or More Responses*



The Department of the Army's Residential Communities Initiative (RCI) conducts a Resident Assessment Survey of Army families living both on-post and off-post. The surveys ask questions focused on resident satisfaction in three areas:

- ◆ *Property*. Unit attributes, heating and air conditioning, housing community, overall satisfaction with property.
- ◆ *Services*. Policies, routine service requests, emergency/urgent service requests, staff and office hours, communications, housing services, overall satisfaction with housing services.
- ◆ *Housing Experience*. Housing assignment, move-in, safety and security, overall satisfaction with housing experience.

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Soldiers are asked if they were satisfied using a five-point scale of “Not at All,” “Slightly,” “Moderately,” “Very,” and “Extremely.” Results of the 2006 survey found that 76 percent were satisfied (slightly or higher) with their overall housing experience while 24 percent were dissatisfied overall. Overall satisfaction with the housing experience varied significantly among posts, ranging from a low of 21 percent to a high of 93 percent.

Satisfaction with individual characteristics of the housing experience showed less variation, from a low of 62 percent (unit attributes) to a high of 93 percent (Heating and Air Conditioning). *Residents in privatized housing had a satisfaction level of 85 percent with the overall housing experience, significantly higher than the 76 percent satisfaction level for residents in all types of housing.* The three characteristics with the highest levels of satisfaction were heating and air conditioning, safety and security, and routine service. The three characteristics with the lowest levels of satisfaction were housing community, move-in, and unit attributes. Residents in newly constructed or recently renovated housing had higher levels of overall satisfaction than did those in older/un-renovated units.

Results were not reported by pay grade or housing type (except for the overall level of satisfaction with the housing experience). Residents were not asked about their satisfaction with housing choices available to them, nor were they asked about their housing preferences.

## Survey of Army Families

In 2001, the Army Community and Family Support Center conducted the fourth Survey of Army Families (SAF) to collect data pertaining to “spouses’ attitudes about the Army way of life and areas important for the well being of Army families.”<sup>1</sup> Housing was one of several topics included in the survey. Other topics included family relocation and separation, employment and volunteer work, children, health care, MWR programs, and installation services. The Army mailed the survey to a stratified, proportional sample of civilian spouses and received a response rate of 33 percent. The results of the survey are based on 6,759 surveys and weighted to reflect the total population of Army civilian spouses by rank.<sup>2</sup>

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<sup>1</sup> <http://www.armymwr.com/corporate/operations/planning/surveys.asp> cited April 2009.

<sup>2</sup> <http://www.armymwr.com/corporate/docs/planning/SAFIVExecutiveSummary.pdf> cited April 2009.

The results also indicate that approximately 14 percent of the civilian spouses live in a separate location than the service member. With regards to housing, the Army reported the following results from the 2001 SAF:<sup>3</sup>

Slightly more than four-fifths (81%) of spouses live in the Continental United States (CONUS). Two-fifths (40%) live on post, 30% live 10 miles or less from post, 17% live 11–25 miles from post, and 12% live over 25 miles from post. In addition to the two-fifths who live in on-post government housing, 27% rent off post, 23% own their own home, and 7% live in off-post government housing. Overall, about three-fifths (62%) are very satisfied or satisfied with their current housing; this includes:

- 92% who own their own home off post;
- 56% in off-post government housing;
- 54% in on-post government housing; and
- 51% in off-post rental housing.

The survey also asked which type of housing the responder would most like to live with 42 percent indicating on-post government housing, 35 percent indicated owning off-post, 14 percent indicating renting off post, 7 percent indicating off-post government, and 2 percent indicating other.<sup>4</sup>

The Executive Summary of the 2001 SAF notes the following differences between the 2001 SAF IV and 1995 SAF III:<sup>5</sup>

- ◆ The percent satisfied with on-post government housing fell from 63 percent in the prior SAF conducted in 1995 to 54 percent in the 2001 SAF
- ◆ 35 percent of responders prefer to own their own home compared to 40 percent in 1995
- ◆ 14.4 would prefer to rent off-post compared to 7.5 percent in 1995
- ◆ Fewer responders were concerned with concerned to a great or very great degree with the cost of housing at their current location (33.2 percent in 1995, 25.8 percent in 2001).

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<sup>3</sup> <http://www.armymwr.com/corporate/docs/planning/SAFIVSummaryReport.pdf> cited April 2009.

<sup>4</sup> <http://www.armymwr.com/corporate/docs/planning/SAFIVFinalQuickSummary.pdf> cited April 2009.

<sup>5</sup> <http://www.armymwr.com/corporate/docs/planning/SAFIVExecutiveSummary.pdf> cited April 2009.

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Based on our internet research, it appears that this was the last SAF conducted by the Army as we did not find any information pertaining to SAF conducted after the 2001 SAF IV summarized above.

## NON DOD SURVEYS AND LITERATURE

### U.S. Census Bureau American Housing Survey: 2005

Every two years, U. S. Department of Housing and Urban Development sponsors the National American Housing Survey which is conducted by the U. S. Census Bureau. Every six years, additional metropolitan surveys are conducted to supplement the national survey. In 2006, the United States Census Bureau published the results of the 2005 American Housing Survey. The most recent survey was conducted in 2005 and surveyed over 50,000 homes in the 50 states and District of Columbia. The Census Bureau, weights each survey response to derive the national estimates presented in the report and summarized below. The survey includes questions regarding housing characteristics (age, location, size, condition, monthly housing expenses etc.), neighborhood characteristics (crime, satisfaction with elementary school, shopping, amenities, etc.), and household characteristics (number and age of people in household, income, commute to work, etc).

According to the 2005 survey results, sixty percent of the housing units are occupied by the owner of the house, 28 percent are occupied by renters, and 12 percent are vacant.<sup>6</sup> The survey found that the majority of respondents were satisfied with the quality of the neighborhood, local elementary schools, and neighborhood shopping facilities:

- ◆ Approximately 68 percent rated the quality of the neighborhood as an 8 or higher (on a scale of 1 [worst] to 10 [best]).
- ◆ Approximately 77 percent of households with children aged 0 to 13 were satisfied with the local public elementary school.
- ◆ Approximately 82 percent were satisfied with the nearby shopping amenities.

The survey also asks current residents who have moved during the past year their main choice for the present neighborhood and the main reason for the choice current home. The top four specified responses for the neighborhood were convenient to job, convenient to friends or relatives, house, and look/design of the neighborhood. The top three specified responses for the choice of house were financial, room layout/design, and size.

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<sup>6</sup> Vacancies include homes that are for sale or for rent (35 percent), have been sold or rented (6 percent), seasonal use or second home (42 percent), and other vacant units (18 percent).

The median household annual income was approximately \$44,500. Owner occupied units reported higher household income than renter occupied units (\$55,571 compared to \$27,051 respectively). The median monthly housing cost in 2005 was \$753 for all occupied units (\$809 for owner occupied units and \$694 for renter occupied units).<sup>7</sup> The median monthly housing cost as a percent of current income for all occupied units is 23 percent. The monthly housing cost as a percent of income for owner occupied units is 20 percent compared to 32 percent for unit occupied by renters. Table C-4 presents the median costs for utilities as reported for total occupied units, owner occupied units, and renter occupied units as reported in the *American Housing Survey for the United States 2005*.

Table C-4. Median Monthly Costs for Utilities and Insurance

	All occupied units	Owner occupied units	Renter occupied units
Electricity	66	71	52
Piped Gas	66	71	49
Fuel Oil	100	104	70
Water	34	35	27
Trash	18	19	17
Bottled Gas	41	42	39
Other fuel	17	17	14
Property Insurance	49	52	19

The Census Bureau American Housing Survey for the United States 2005 did not report a monthly cost that included both monthly housing expenses and monthly costs for utilities and insurance.

## GAO

The Government Accountability Office has published several reports regarding military family housing and the DoD housing privatization program. There are two key items of interest that GAO has surfaced in their reports. First, they have identified management oversight and reporting as the primary area of the housing privatization program that could be improved. Secondly, they have identified the requirements determination process, and more recently the occupancy levels of privatization projects, as areas which the DoD and the services should examine.

In a report dated April 2006, GAO studied the housing privatization programs for all of the services to determine if there was potential to improve the oversight of these projects and how well the projects are meeting the occupancy levels

<sup>7</sup> Monthly housing costs include rent or mortgage, insurance, taxes, etc., but do not include the cost of utilities or maintenance and repairs. If maintenance costs are included in monthly housing cost amount for owner occupants, the monthly housing cost increases to \$853.

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established during project award.<sup>8</sup> GAO found that DoD’s primary oversight tool—the semiannual privatization program evaluation tool—does not focus on key project performance metrics that would help to highlight financial or operational issues. They found that the Navy’s oversight and monitoring of their housing privatization program was less robust than that of the Army and Air Force and recommended that the Navy improve their oversight activities. They found that some projects were experiencing occupancy levels lower than anticipated, resulting in financing and project viability issues. Additionally GAO found that data collected by the services on customer satisfaction with housing is incomplete and inconsistent.

In June 2002, GAO reported that the DOD “privatization projects are not supported by reliable needs assessments, and the overall requirement for military housing is not well defined.”<sup>9</sup> GAO found that the services use inconsistent methodologies to determine the ability of the private sector surrounding installations to meet the housing needs of military families, resulting in often overstated military housing requirements. Further, they found differences between on-base and off-base housing standards that would be expected to influence service families’ housing preferences, and that DoD has not assessed the effect of these differences on housing requirements.

## An Evaluation of Housing Options for Military Families— 1999 Rand Study

In 1999, RAND’s National Defense Research Institute published a study which examined service members housing preferences. This study collected data from the 1997 Survey of Military Members’ Housing Choices and Preferences designed and administered by RAND which was conducted at 12 military installations across the continental United States. Rand also used information from the 1990 U.S. Census.

First the study assessed the housing choice made by military families. In 1999, military families had three options for housing—1) live in military housing, 2) rent housing in the private sector, or 3) own housing in the private sector. This study found that approximately one-half of junior enlisted grade personnel and one-third senior enlisted and officers lived in military housing. The majority of E3 through E6 grades rented housing in the community, while the majority of E7 and above as well as officers owned homes in the community.

By far, the most commonly cited primary reason for selecting military housing was economics. A large percentage of military housing occupants cited “good economic decision” as the primary reason for opting to live in government

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<sup>8</sup> *Military Housing: Management Issues Require Attention as the Privatization Program Matures*, GAO, April 2006.

<sup>9</sup> *Military Housing: Management Improvements Needed as Privatization Pace Quickens*, GAO, June 2002, p.1.



quarters. Security, proximity to work, and availability were the distant second, third, and fourth primary reasons for selecting housing. However, these significantly trailed the number of responders citing economics as the primary reason.

For military members renting civilian housing, the most commonly reported reason for opting to rent was “military housing unavailable.” Fewer rules and privacy were also commonly cited primary reasons for renting in the community.

Home owners, like military housing residents, reported “investment” and “good economic decision” as two primary reasons for purchasing a home. Fewer rules and military housing unavailable were the third and fourth most commonly selected reasons for housing choice for this group of service members.

The RAND study found that the majority of all three groups of service members are satisfied with the quality of their home. However, a larger percentage of service members who own homes reported being satisfied compared to the service members who rent or live in military housing. Even service members renting housing reported a higher percentage who were satisfied with the quality of their housing than those living in military housing.

The study also compared the types and characteristics of military and private sector housing for 391 geographic areas with more than 500 military members and 1335 geographic areas with less than 500 military families. The study found that military housing is older than private sector housing and consists of more attached houses and fewer apartment complexes and single family homes than the private sector. Additionally, military housing has more housing units with four or more bedrooms compared to the civilian rental population. As one would expect, members living in military housing also had a shorter commute to work than both the civilian population and the military population renting or owning in the civilian market.

## Blogs

Online discussions posted on blogs (SpouseBuzz on military.com, for example) are another source for information on satisfaction with military and privatized housing, and community housing to a lesser extent. The opinions and experiences in blog postings cover the gamut of housing issues and are varied in the stated “levels of satisfaction or dissatisfaction” with different aspects of the housing experience—from very negative to very positive. These blogs are useful ways for service members to read about the personal experiences of others; however their representativeness for all military families, and therefore their usefulness in making general conclusions about housing choices and satisfaction, is questionable.

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## OTHER (PRIVATE SECTOR, STATES)

Private sector and other government information on satisfaction with family housing is sparse, and what is publicly available is limited to either public housing (locally provided or Federally supported by the Department of Housing and Urban Development) or housing for the developmentally disabled. We did not consider these alternatives to be comparable to military family housing choices for statistical comparison purposes.

## Appendix D

# Summary of Findings from Site Visits

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For this study, LMI and OSD visited five installations to gain an understanding what choices service members make in deciding where to live and the factors that influence those choices. At each location, we met with the command and housing representatives and toured both privatized housing and the local neighborhoods. Table D-1 presents the locations and dates of the five site visits. In this appendix we summarize the findings from our five site visits.

*Table D-1. Locations and Dates of Site Visits Conducted*

Location	Service	Dates visited
Fort Hood, TX	Army	March 12-15, 2007
Hampton Roads, VA	Navy	April 16-18, 2007
Kirkland, NM	Air Force	April 23-25, 2007
San Diego, CA	Navy	September 24-26, 2007
Camp Pendleton, CA	Marine Corps	September 26-28, 2007

## BASIC ALLOWANCE FOR HOUSING

According to the discussions held during the site visits, service members have more housing options available to them as a result of the increase in BAH seen since 2001. Prior to the Cohen Housing Allowance Initiative of 2001, BAH was calculated at 85 percent of the cost of rent, utilities, and renter's insurance paid for private-sector housing. As such, service members living in the economy were paying an average of 15 percent of housing costs out-of-pocket. The 2001 Cohen Housing Allowance Initiative changed the calculation so that 100 percent of housing costs are now included in the BAH rate. This increase in BAH has made renting and owning homes more affordable to service members.

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# PREFERENCES FOR LIVING ON- OR OFF-BASE

## Preference for Living On-Base

We asked the housing representatives what reasons they commonly heard from service member preferring to live on-base. The reasons we heard during our site visits are similar to those cited in the Status of Forces Survey results. They are as follows:

- ◆ Want to live in a military community and the support services available on-base.
- ◆ Better value—get more for their BAH, no out-of pocket expenses, no deposits, rent includes utilities and renters insurance, and size and quality of the newly constructed homes are better than service members can find in the economy for the same price.
- ◆ Shorter and less expensive commute.
- ◆ Quality of the neighborhoods—safe, convenient, and amenities offered.

## Preference for Living Off-Base

We asked the housing representatives what reasons they commonly heard from service member preferring to live off-base. The reasons we heard during our site visits are similar to those cited in the Status of Forces Survey results. They are as follows:

- ◆ Separation of military life and home life and privacy
- ◆ Buy a home
- ◆ Ability to get a larger home off-base
- ◆ Amenities of off-base communities
- ◆ Availability
- ◆ Better school systems
- ◆ Had an unpleasant experience in government or privatized housing.

## PRIVATIZED HOUSING

In general, the housing representatives felt that residents were satisfied with privatized housing. Residents often prefer to live in newly constructed units which are often larger and built to a higher construction standard than the military housing units transferred as “no-work” units or undergo renovations. In locations where pet policies differ among neighborhoods, neighborhoods that allow pets often have longer waiting lists than those that do not allow pets. Some housing privatization partners offer reduced rent or other concessions to keep less desirable units occupied. When occupancy levels fall below target levels even after the offering of concessions, some business partners have begun using the waterfall and opening vacant units to bachelors, reserve and guard members, DoD civilians, and lastly, non-affiliated civilians.

The length of the waiting list varies from installation to installation and sometimes even from neighborhood to neighborhood. One installation visited would like for service members to have the option of getting on the waiting list or signing a lease prior to arriving at the installation like they can do in the private sector. Currently, at this installation, service members must detach from their previous installation prior to getting on the waiting list for housing at the gaining installation.

Another issue with privatized housing raised by service members is that BAH is based on rank and not size or quality of the house like the private sector. This policy follows the premise of forfeiture of BAH when the housing was owned and operated by the military. Prior to privatization, service members living in government quarters did not pay rent and did not receive BAH. In privatized housing, residents collect BAH and pay that amount in rent. However, now that residents are seeing the BAH in their earnings statement, some feel it is unfair for an E7 to pay more in rent for the same house as an E3 due solely to the differences in rank. This discontent is amplified when the lower ranks are living in larger and/or newer homes than the higher ranks.

All locations visited conduct annual surveys to monitor resident satisfaction. All use the information from the survey to identify items to be improved. In addition to the annual surveys, some installations also have “points of service” comments cards that residents can fill out to comment on satisfaction with a particular service (e.g. move-in process, maintenance work order, check-out process, etc.).

## REFERRAL SERVICES

Although it is stated on all orders that families must check into the housing office when arriving at the installation, not all do. Sponsorship and ombudsman programs encourage service members to visit the housing office. However, the strength of these programs varies widely from one installation to the next and even from one chain of command to the next.

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DoD has recently developed AHRN, a web-based tool that allows incoming service members to view rental properties available near their duty station. Owners of rental properties can post pictures and descriptions of their properties on the website and update the status of each property as changes occur. At the time of this study, AHRN was available at select installations but had not been deployed across installation at all services. Three of the five installations visited were using AHRN. All five installations liked the idea of having a single consolidated website with the rental properties listed and updated by the rental owner. However, we heard several concerns about AHRN during our site visit. Specifically, we note the following concerns:

- ◆ AHRN is not available in all locations so service members may be aware that the tool is available to them.
- ◆ AHRN may result in less service members using the housing office, which provides education on leasing terms and tenant responsibilities, since they can go directly to a website to find rental properties.
- ◆ Services are concerned that rental rates in AHRN will be used to calculate BAH. Without proper review of the listings and verification of the rental rates, the information in the system may result in a BAH rate which doesn't reflect the rental rates for desirable rental units.
- ◆ AHRN doesn't have the capability of tracking complaints against specific landlords.

Prior to privatization, several installations operated a program which offered reductions or waivers to utility and rental deposits for service members. San Diego stopped this program to encourage service members to live in privatized housing. However, Hampton Roads and Fort Hood continue to operate their waiver program which helps encourage service members to use the services offered by the housing office.

# Appendix E

## DoD Military Housing Privatization Project Listing

Table E-1 presents a listing of the DoD military housing privatization projects that have been awarded as of July 2009.<sup>1</sup>

*Table E-1. DoD Military Housing Privatization Projects  
(Alphabetized by Large Group Projects [Bolded], then by Individual/Small Group Projects)*

Installation	Scope	Awarded
<b>Air Force, ACCG2:</b> Davis-Monthan AFB, AZ; Holloman AFB, NM	1,838	Jul-07
<b>Air Force, AETC-1:</b> Altus AFB, OK; Luke AFB, AZ; Sheppard AFB, TX; Tyndall AFB, FL	2,875	Feb-07
<b>Air Force, AETC-2:</b> Columbus AFB, MS; Goodfellow AFB, TX; Laughlin AFB, TX; Maxwell AFB, AL; Randolph AFB, TX; Vance AFB, OK	2,257	Sep-07
<b>Air Force, AMC East:</b> Andrews AFB, MD; MacDill AFB, FL	1,458	Nov-07
<b>Air Force, AMC West:</b> Travis AFB, CA; Fairchild AFB, WA; Tinker AFB, OK	2,435	Jul-08
<b>Air Force, BLB:</b> Barksdale AFB, LA; Langley AFB, VA; Bolling AFB, DC	3,189	Sep-07
<b>Marine Corps, Camp Lejeune/Cherry Point Overview:</b> MCB Camp Lejeune/MCAS Cherry Point, NC (Phases 1-3) (Includes Westover, MA; Stewart, NY; MCAS Beaufort & MCRD Parris Island, SC	8,059	Sep-07
<b>Air Force, Falcon Group:</b>		
Hanscom AFB, MA	784	Oct-04
Little Rock AFB, AR	1,200	Jul-04
Moody AFB, GA	606	Feb-04
Patrick AFB, FL	552	Oct-03
<b>Navy, Mid-Atlantic Region:</b> Hampton Roads USNA, VA (Naval Station Norfolk, Naval Weapons Station Yorktown, Naval Medical Center Portsmouth, Norfolk Naval Shipyard, Naval Amphibious Base Little Creek, Naval Air Station Oceana and Dam Neck Annex, Naval Support Activity Norfolk Northwest Annex), Annapolis, MD; NSWC, Indian Head, MD; NSWC, Dahlgren, VA; NSGA, Sugar Grove, WV; NAS, Patuxent River, MD	5,839	Aug-05
<b>Navy, Midwest Region (Phase 1):</b> Great Lakes, IL; Crane, IN	1,976	Dec-05
<b>Navy, Midwest Region (Phase 2):</b> South Millington, TN	NA	Sep-07
<b>Navy, Northwest Region (Phase 1):</b> Naval Base Kitsap-Bangor; Naval Undersea Warfare Center Keyport; Naval Magazine Indian Island; Olalla; Kingston-Bainbridge Island; Naval Base Kitsap-Bremerton; various	2,985	Feb-05
<b>Navy, Southeast Region:</b> Naval Weapons Station Charleston, SC; NAS Joint Reserve Base Fort Worth, TX; Naval Construction Battalion Center Gulfport, MS; NAS Jacksonville, FL; NS Mayport, FL; NAS Pensacola, FL; NAS Whiting Field, FL; NAS Key West, FL; NSB Kings Bay, GA; NAS Meridian, MS; NSA Panama City, FL	5,269	Sep-07
<b>Army, NE Integrated (Phase 1):</b> WRAMC DC; Fort Detrick, MD	590	Jul-04

<sup>1</sup> Project list supplied by Mr. George Mino of Office of Secretary of Defense, Housing and Competitive Sourcing on September 16, 2009.

*Table E-1. DoD Military Housing Privatization Projects  
(Alphabetized by Large Group Projects [Bolded], then by Individual/Small Group Projects)*

Installation	Scope	Awarded
<b>Army, NE Integrated( Phase 2):</b> (Carlisle Barracks, Picatinny Arsenal)	348	May-06
<b>Navy, Northeast Region:</b> NSB New London (Groton and Fairfield CT); NSU Saratoga Springs, NY; NAVSTA Newport, RI; NAS Brunswick, ME; Mitchel Complex, NY; NAES Lakehurst, NJ; Naval Shipyard Portsmouth, ME; NWS Earle, NJ	4,264	Nov-04
<b>Marine Corps, PE/QU/YU (Camp Pendleton II):</b> MCB Camp Pendleton, CA (Phase 2-5— includes MCB Quantico, VA; MCAS Yuma, AZ; MCLB Albany, GA; MCAS Kansas City, MO, and MCGACC 29 Palms, CA)	10,375	Sep-07
<b>Air Force, Tri-Group:</b> Peterson AFB, CO; Schriever AFB, CO; Los Angeles AFB, CA	1,564	Sep-07
<b>Air Force,</b> Buckley AFB, CO	351	Aug-04
<b>Air Force,</b> Dover AFB, DE	980	Sep-05
<b>Air Force,</b> Dyess AFB, TX	402	Sep-00
<b>Air Force,</b> Elmendorf AFB, AK	828	Mar-01
<b>Air Force,</b> Elmendorf AFB, AK (Phase 2)	1,194	Sep-04
<b>Army,</b> Fort Belvoir, VA	2,070	Dec-03
<b>Army,</b> Fort Benning, GA	4,200	Jan-06
<b>Army,</b> Fort Bliss, TX; White Sands Missile Range, NM	3,277	Jul-05
<b>Army,</b> Fort Bragg, NC	6,517	Nov-03
<b>Army,</b> Fort Campbell, KY	4,455	Dec-03
<b>Army,</b> Fort Carson, CO	3,087	Sep-99
<b>Army,</b> Fort Drum, NY	3,861	May-05
<b>Army,</b> Fort Drum, NY (Phase 2)	554	Sep-08
<b>Army,</b> Fort Eustis, Fort Story, VA	1,124	Dec-04
<b>Army,</b> Fort Gordon, GA	887	May-06
<b>Army,</b> Fort Hamilton, NY	228	Jun-04
<b>Army,</b> Fort Hood, TX	5,912	Oct-01
<b>Army,</b> Fort Irwin, Moffett Field, Parks Training Area, CA	3,126	Mar-04
<b>Army,</b> Fort Jackson, SC	850	Aug-08
<b>Army,</b> Fort Lee, VA	1,590	Sep-07
<b>Army,</b> Fort Leonard Wood, MO	2,242	Mar-05
<b>Army,</b> Fort Lewis/McChord AFB, WA	4,023	Nov-08
<b>Army,</b> Fort Knox, KY	2,527	Dec-06
<b>Army,</b> Fort Leavenworth, KS	1,583	Mar-06
<b>Army,</b> Fort Lewis, WA	4,001	Apr-02
<b>Army,</b> Fort Meade, MD	3,170	May-02
<b>Army,</b> Fort Polk, LA	3,821	Sep-04
<b>Army,</b> Fort Riley, KS	3,514	Jul-06
<b>Army,</b> Fort Rucker, AL	1,476	Apr-06
<b>Army,</b> Fort Sam Houston, TX	925	Mar-05
<b>Army,</b> Fort Shafter, Schofield Barracks and other Army HI sites	7,894	Oct-04
<b>Army,</b> Fort Sill, OK	1,650	Nov-08



*Table E-1. DoD Military Housing Privatization Projects  
(Alphabetized by Large Group Projects [Bolded], then by Individual/Small Group Projects)*

Installation	Scope	Awarded
<b>Army</b> , Fort Stewart/Hunter Army Airfield, GA	4,036	Nov-03
<b>Navy</b> , Navy Region, Hawaii (Phases 1-4)	6,557	Sep-07
<b>Air Force</b> , Hickam AFB, HI (Phase 1)	1,356	Feb-05
<b>Air Force</b> , Hickam AFB, HI (Phase 2)	1,118	Aug-07
<b>Air Force</b> , Hill AFB, UT	1,018	Sep-05
<b>Air Force</b> , Kirtland AFB, NM	1,078	Apr-03
<b>Air Force</b> , Lackland AFB, TX	420	Aug-98
<b>Air Force</b> , Lackland AFB, TX (Phase 2)	463	Nov-08
<b>Marine Corps</b> , Marine Corps Base Camp Pendleton, CA (Phase I)	712	Nov-00
<b>Marine Corps</b> , MCAS Yuma, AZ; MCB Camp Pendleton, CA	NA	Oct-04
<b>Marine Corps</b> , MCB Hawaii (Phase 4)	NA	Sep-07
<b>Marine Corps</b> , MCB Camp Lejeune, Cherry Point, NC; Westover, MA (Phase 3)	NA	Sep-07
<b>Marine Corps</b> , MCB Camp Pendleton, CA; Albany, GA (Phase 5)	NA	Sep-07
<b>Marine Corps</b> , MCB Lejeune, MCAS Cherry Point, NC; Stewart, NY	NA	Sep-05
<b>Marine Corps</b> , MCB Camp Lejeune, MCAS Cherry Point, NC (Ph 2)	NA	Sep-06
<b>Marine Corps</b> , MCB Camp Pendleton, CA (Ph 4)	NA	Sep-06
<b>Marine Corps</b> , MCB Hawaii, HI (Phase 2)	NA	Sep-06
<b>Air Force</b> , McGuire AFB and (Army) Fort Dix, NJ	2,084	Sep-06
<b>Marine Corps</b> , MCSA Kansas City, MO; MCGACC 29 Palms, CA	NA	Sep-05
<b>Navy</b> , Naval Air Station Corpus Christi/NAS Kingsville, TX (Phase 1)	404	Jul-96
<b>Navy</b> , Naval Air Station Kingsville, TX (Phase 2)	150	Nov-00
<b>Navy</b> , Naval Complex New Orleans, LA	941	Oct-01
<b>Navy</b> , Naval Complex San Diego, CA (Phases 1-4 total)	14,265	May-06
<b>Navy</b> , Naval Complex San Diego, CA (Phase 2)	NA	May-03
<b>Navy</b> , Naval Complex San Diego, CA (Phase 3)	NA	May-06
<b>Navy</b> , Naval Complex South Texas, TX	665	Feb-02
<b>Navy</b> , Naval Station Everett, WA (Phase 1)	185	Mar-97
<b>Navy</b> , Naval Station Everett, WA (Phase 2)	288	Dec-00
<b>Navy</b> , Navy Region, Hawaii (Phase 3)	NA	Sep-06
<b>Navy</b> , Naval Complex San Diego (Phase 4) includes NAWS China Lake, CA; NAF El Centro, CA; NAS Fallon, NV; NWS Seal Beach, CA; and NB Ventura County, CA)	NA	Sep-07
<b>Air Force</b> , Nellis AFB, NV	1,178	May-06
<b>Air Force</b> , Offutt AFB, NE	1,640	Sep-05
<b>Army</b> , Presidio of Monterey and (Navy) Naval Postgraduate School, CA	2,209	Oct-03
<b>Army</b> , Redstone Arsenal, AL	230	Oct-06
<b>Air Force</b> , Robins AFB, GA	670	Sep-00
<b>Air Force</b> , Robins AFB, GA (Phase 2)	207	Sep-07
<b>Air Force</b> , Scott AFB, IL	1,593	Jan-06
<b>Air Force</b> , USAF Academy, CO	427	May-07

*Table E-1. DoD Military Housing Privatization Projects  
(Alphabetized by Large Group Projects [Bolded], then by Individual/Small Group Projects)*

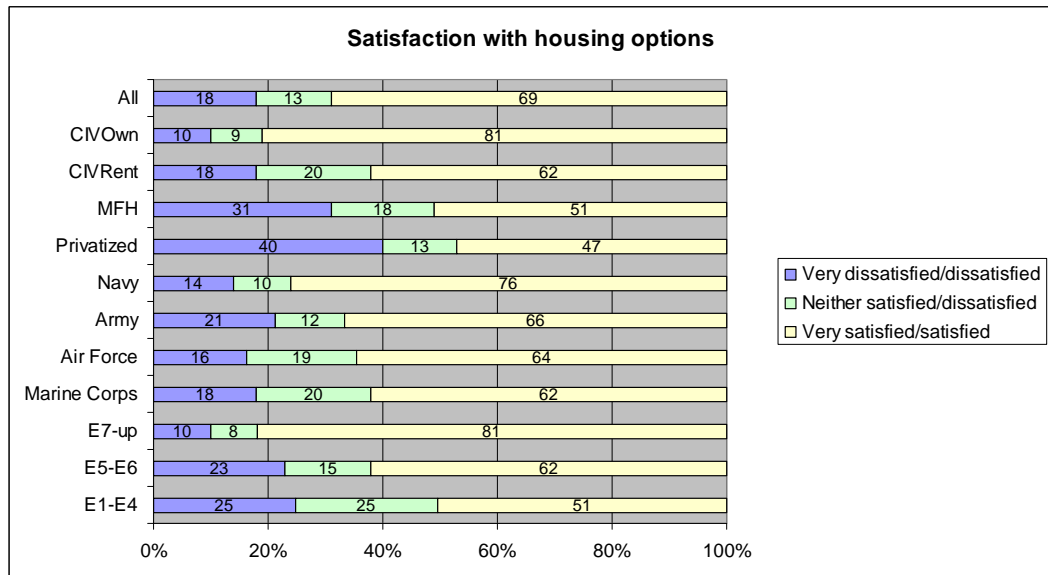
Installation	Scope	Awarded
<b>Air Force</b> , Vandenberg AFB, CA	867	Nov-07
<b>Army</b> , West Point, NY	824	Aug-08
<b>Air Force</b> , Wright-Patterson AFB, OH	1,536	Aug-02
Total MHPI program awards	187,903	

# Appendix F

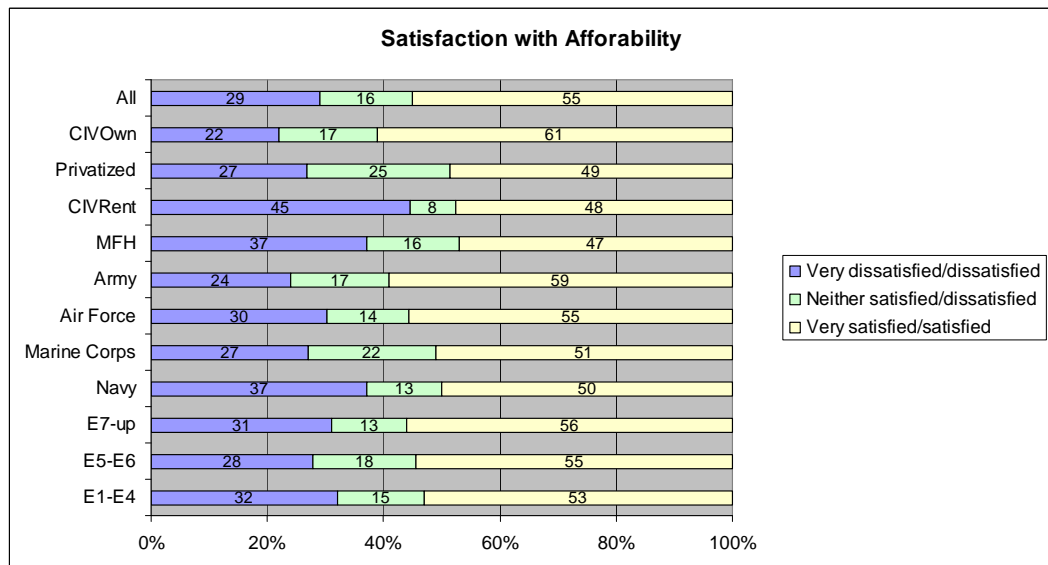
## Satisfaction Detail

### SUMMARY OF SATISFACTION BY FACTORS SURVEYED

#### Housing Options



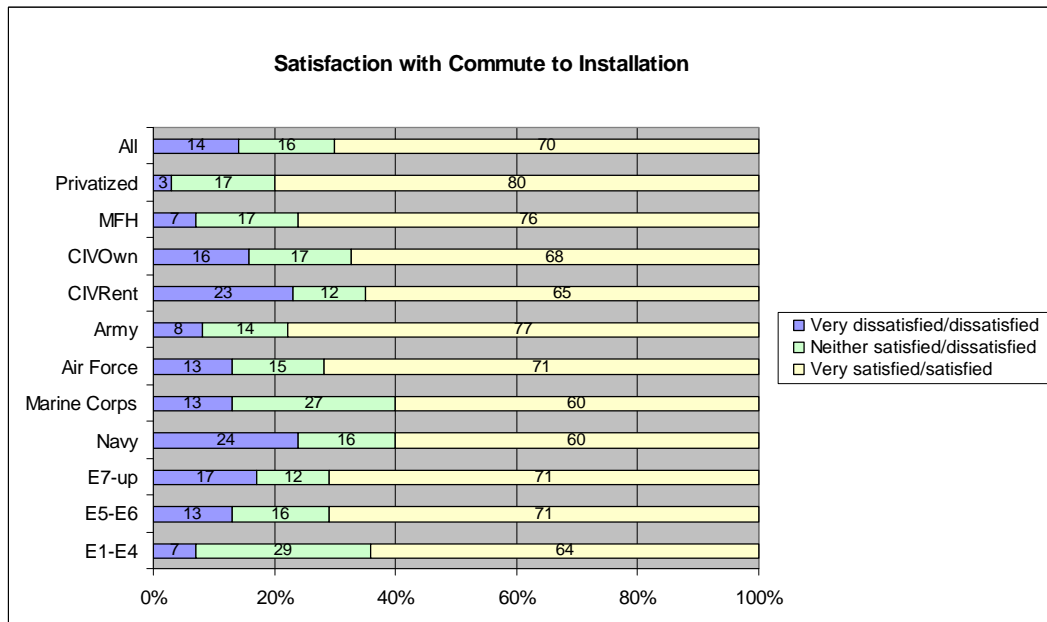
#### Affordability



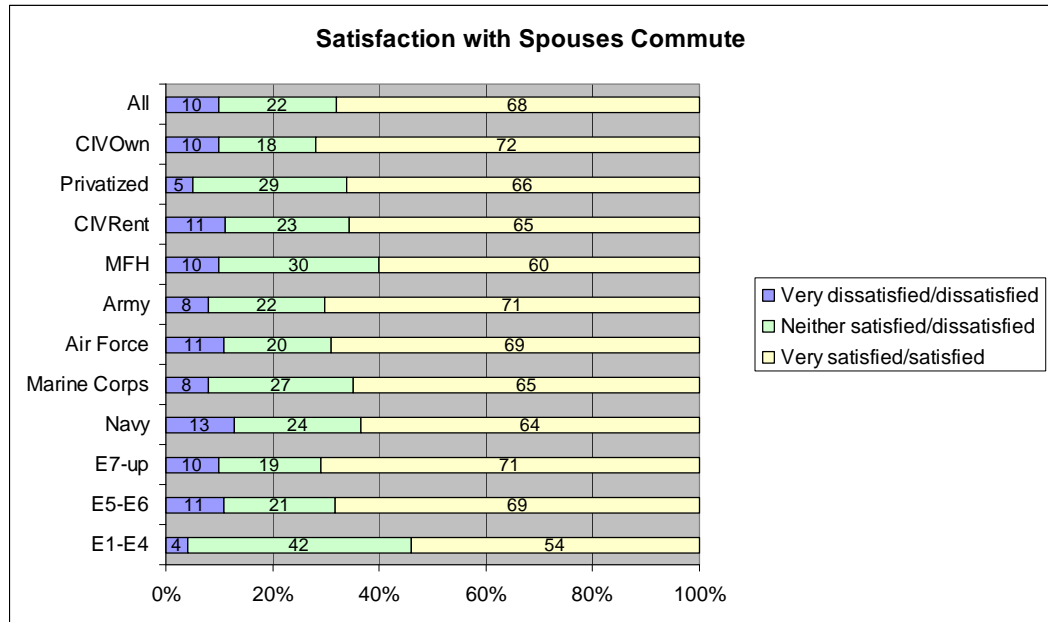
# Quality of Residence



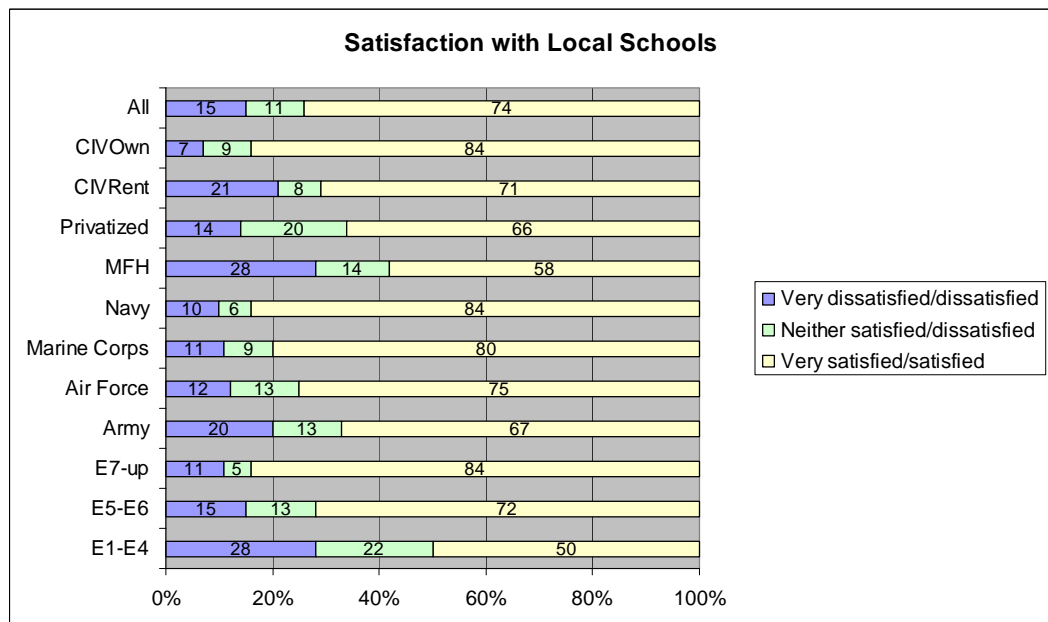
# Commute to Installation



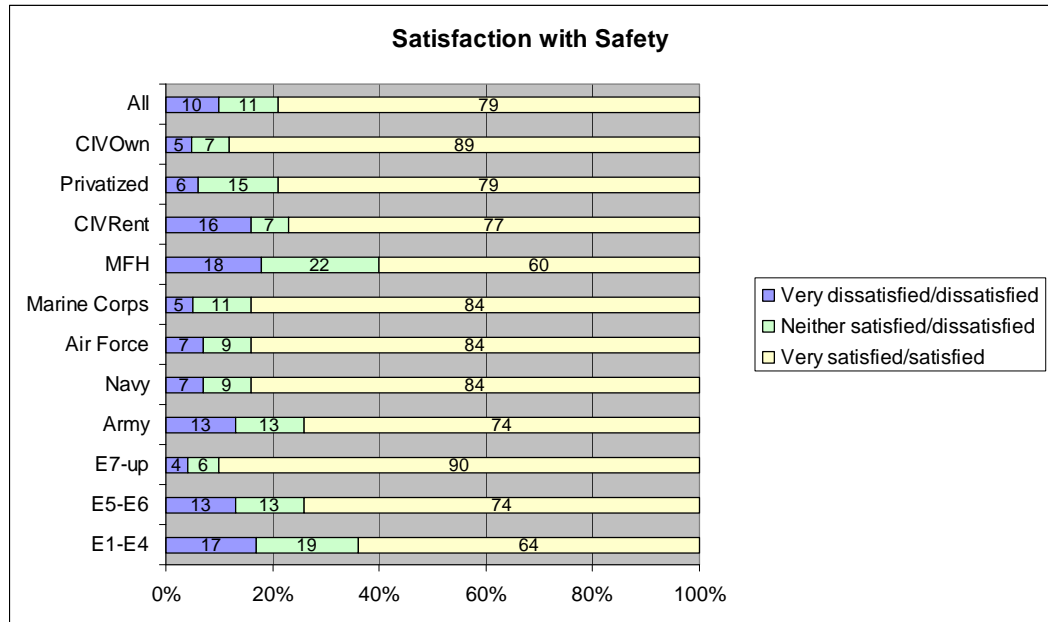
## Spouse Commute



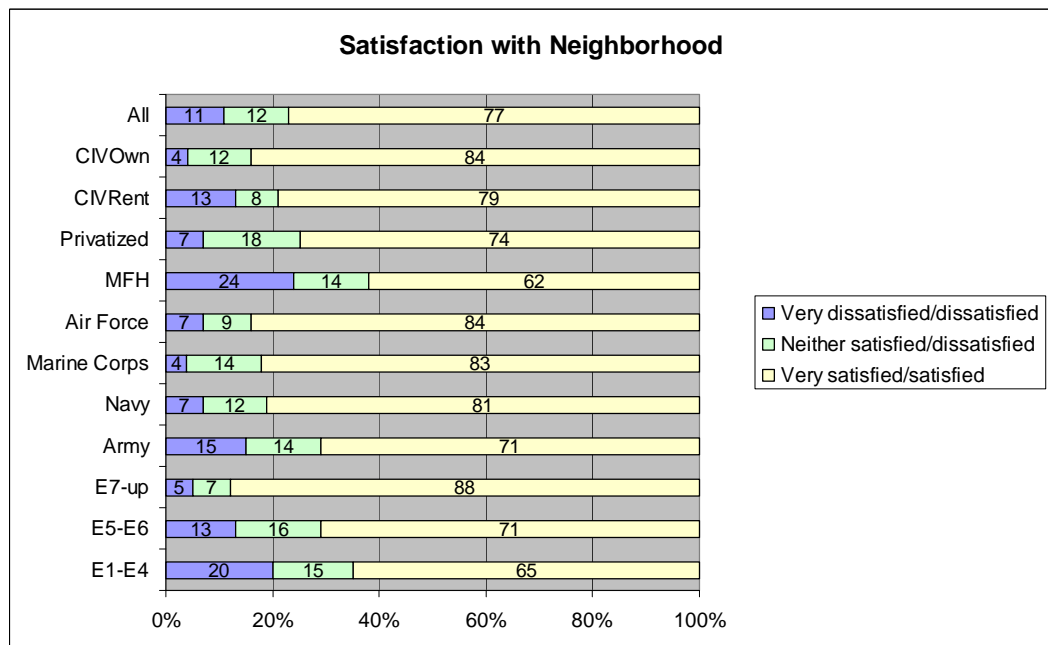
## Local Schools



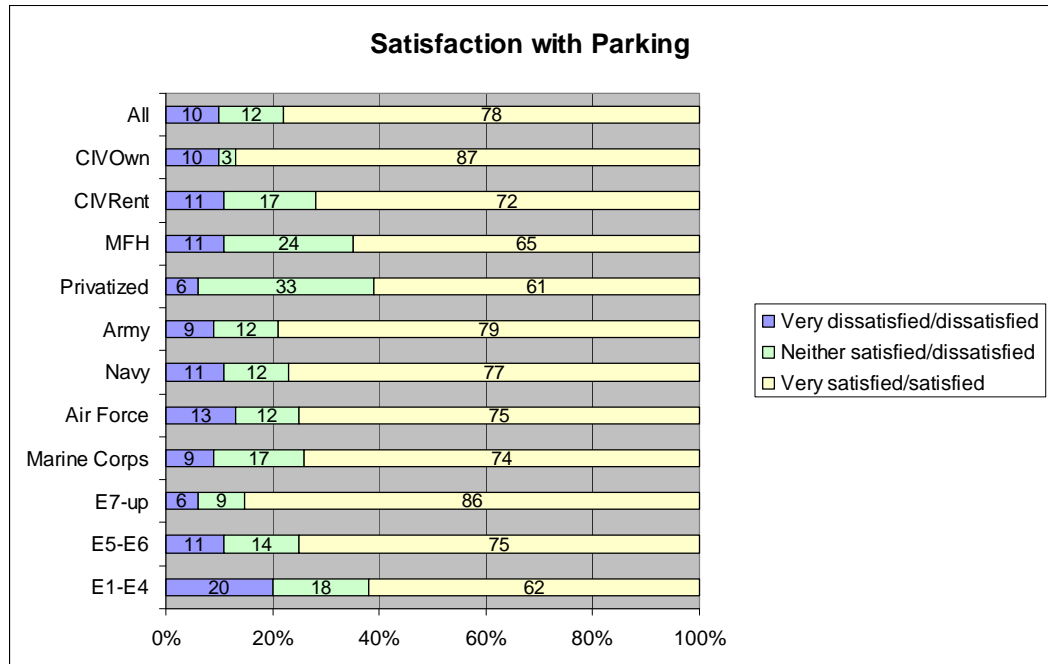
## Safety and Security of Area



## Quality of Neighborhood

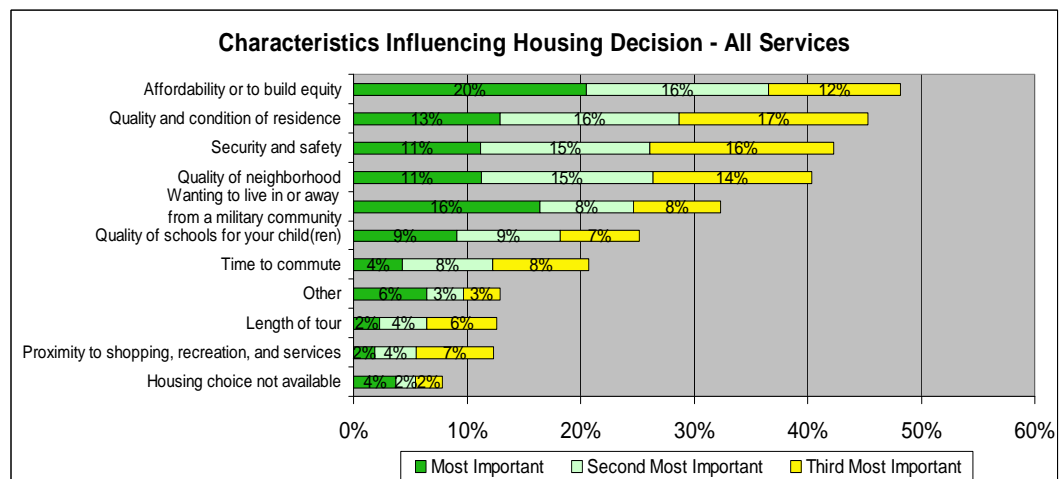


## Parking

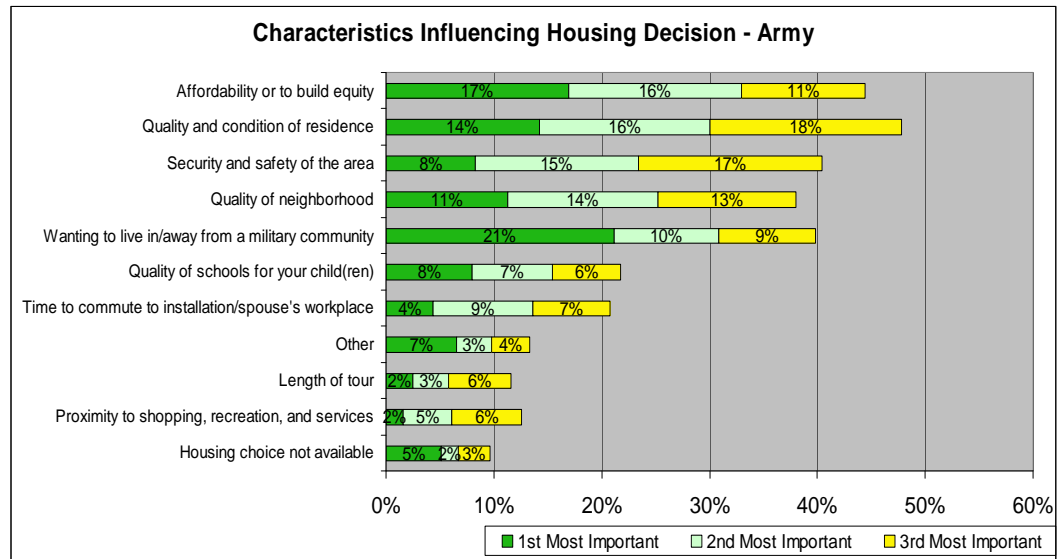


## HOUSING CHARACTERISTICS INFLUENCING HOUSING DECISIONS, BY SERVICE

### All Services

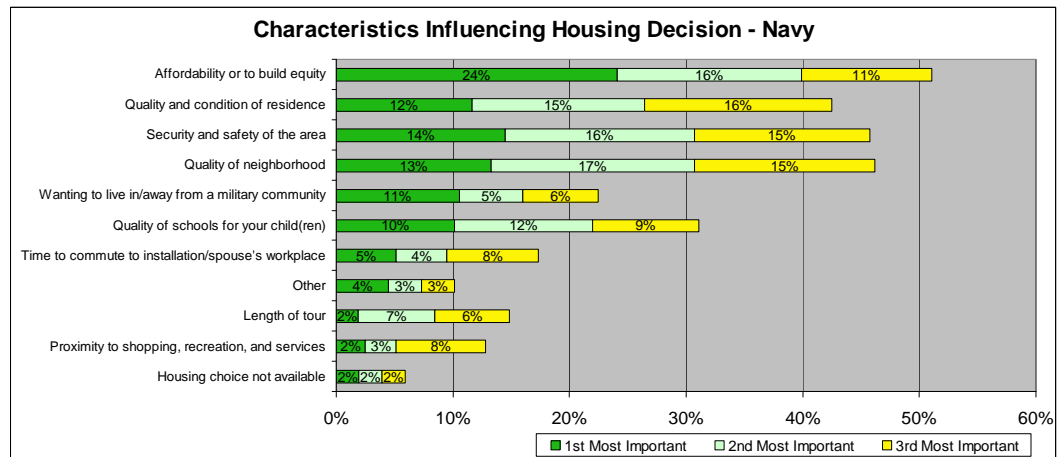


# Army



For the Army, quality and condition of residence had the highest importance (this was second for all services), slightly higher than affordability or to build equity (this was first for all services). Wanting to live in/away from a military community was fourth instead of fifth, trading places slightly with quality of neighborhood.

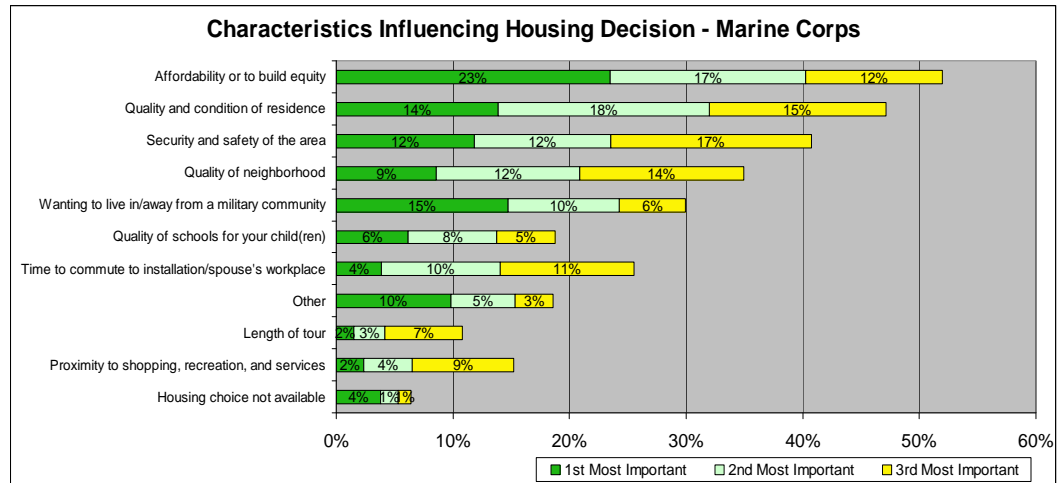
# Navy



For the Navy, availability or to build equity retained the highest importance. However, quality of neighborhood, and security and safety, were the second and third most important, with quality of residence being fourth for the Navy compared to second for all services. In addition, quality of schools ranked as more important than wanting to live in/away from a military community compared to all services.

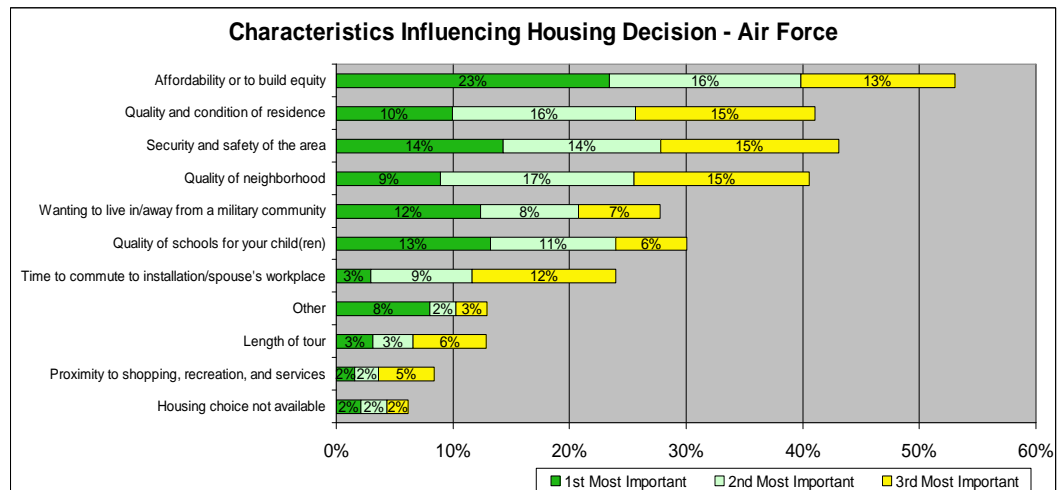


## Marine Corps



For the Marine Corps, the top 5 factors were the same as for all services, while time to commute to spouse's workplace switched places with (more important than) quality of schools compared to all services. The same was true for proximity to shopping, recreation and services being more important than length of tour for the Marines versus all services.

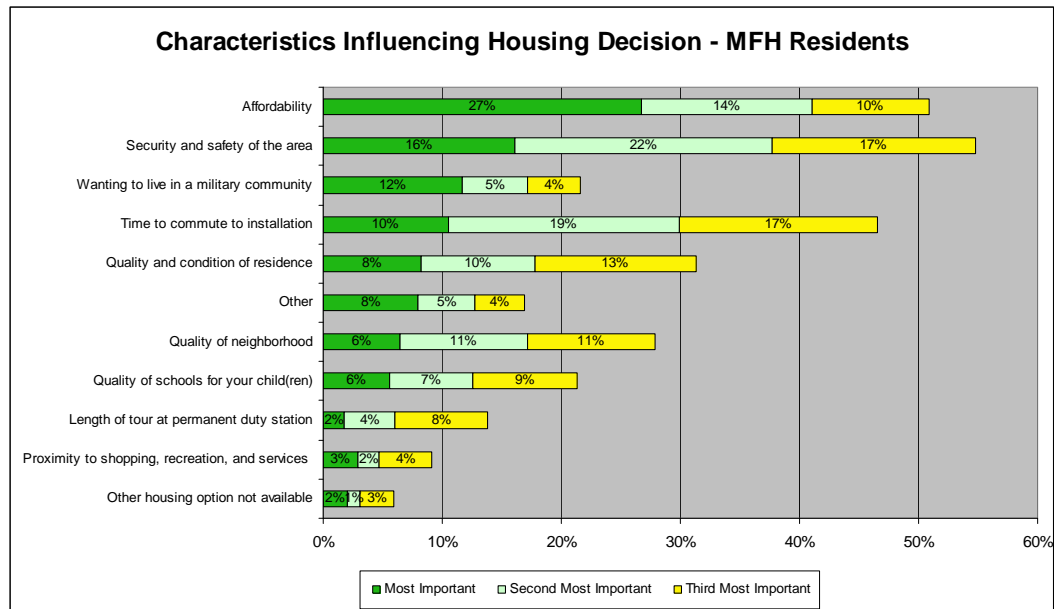
## Air Force



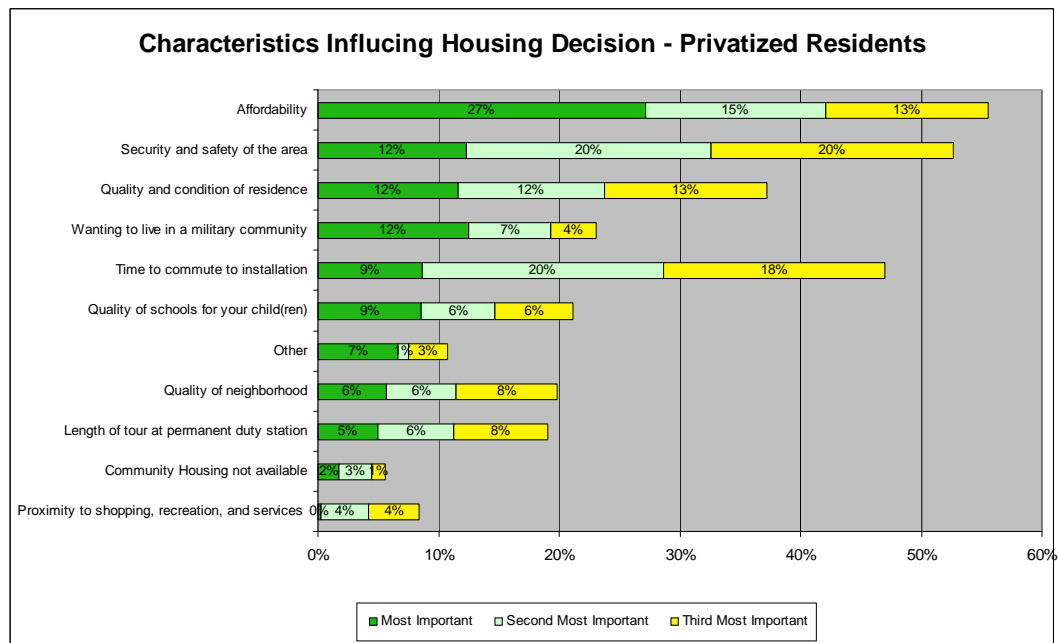
For the Air Force, security and safety moved from third to second most important, switching places with quality and condition of residence. Similarly, quality of schools is more important than wanting to live in or away from a military community compared to all services.

# HOUSING CHARACTERISTICS INFLUENCING HOUSING DECISIONS, COMPARISON BETWEEN RESIDENTS OF MFH AND PRIVATIZED HOUSING

## Residents of MFH



## Residents of Privatized Housing



# Appendix G

## DMDC Survey Instruments and Results (2003/05/07/09)

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As an environmentally friendly measure and to limit the size of the printed report, this appendix is included on a CD placed inside the back cover. It contains the 2003, 2005, 2007, 2009 DMDC Status of Forces Survey of active duty members and the DMDC summary results briefing for the housing related questions in the 2003, 2005, and 2007 surveys instrument.

Specifically we have included the following documents in this Appendix:

- ◆ July 2003 Status of Forces Survey of Active Duty Members and Housing Results, Housing Questions numbered 55-64,
- ◆ August 2005 Status of Forces Survey of Active Duty Members and Housing Results, Housing Questions numbered 51-60,
- ◆ April 2007 Status of Forces Survey of Active Duty Members and Housing Results, Housing Questions numbered 86-106, and
- ◆ August 2009 Status of Forces Survey of Active Duty Members, Housing questions numbered 20 and 97-115.

The DMDC results of the 2007 survey include all survey responders. The LMI study results presented in the body of the Housing Choices report exclude service members stationed overseas, unaccompanied service members, and geographic bachelors. As such, direct comparisons between the LMI study and the DMDC results cannot be made.

