

HRMA

Housing Requirements and Market Analysis

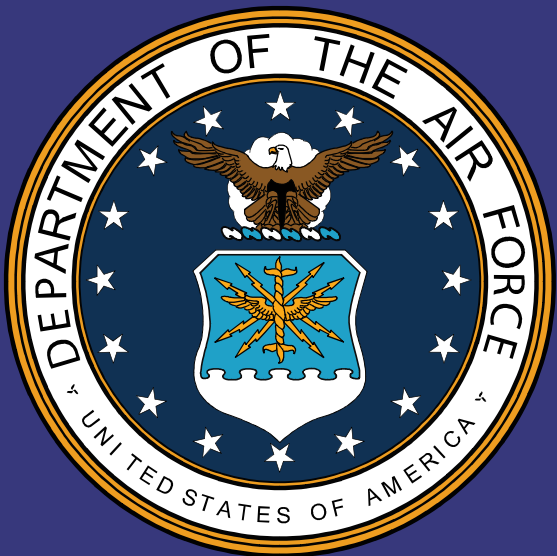


United States Air Force

McCONNELL

AIR FORCE BASE

KANSAS



2009 - 2014

JULY 2008

HOUSING REQUIREMENTS AND MARKET ANALYSIS

**McConnell Air Force Base
2009 – 2014**

Prepared for:

Air Force Center for Engineering and the Environment
(AFCEE)

Air Force Housing Division (AF/A7CAH)

Air Mobility Command (AMC)

McConnell Air Force Base

Prepared by:

Science Applications International Corporation (SAIC)

Published:

July 24, 2009

HOUSING REQUIREMENTS AND MARKET ANALYSIS

**McConnell Air Force Base
2009 – 2014**

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

This Housing Requirements and Market Analysis (HRMA) for McConnell Air Force Base (AFB), Kansas, assesses the ability of the private sector housing market to meet the needs of military families. The McConnell AFB study results are:

Total Military Family Housing Requirement	311
-------------------------------------------	-----

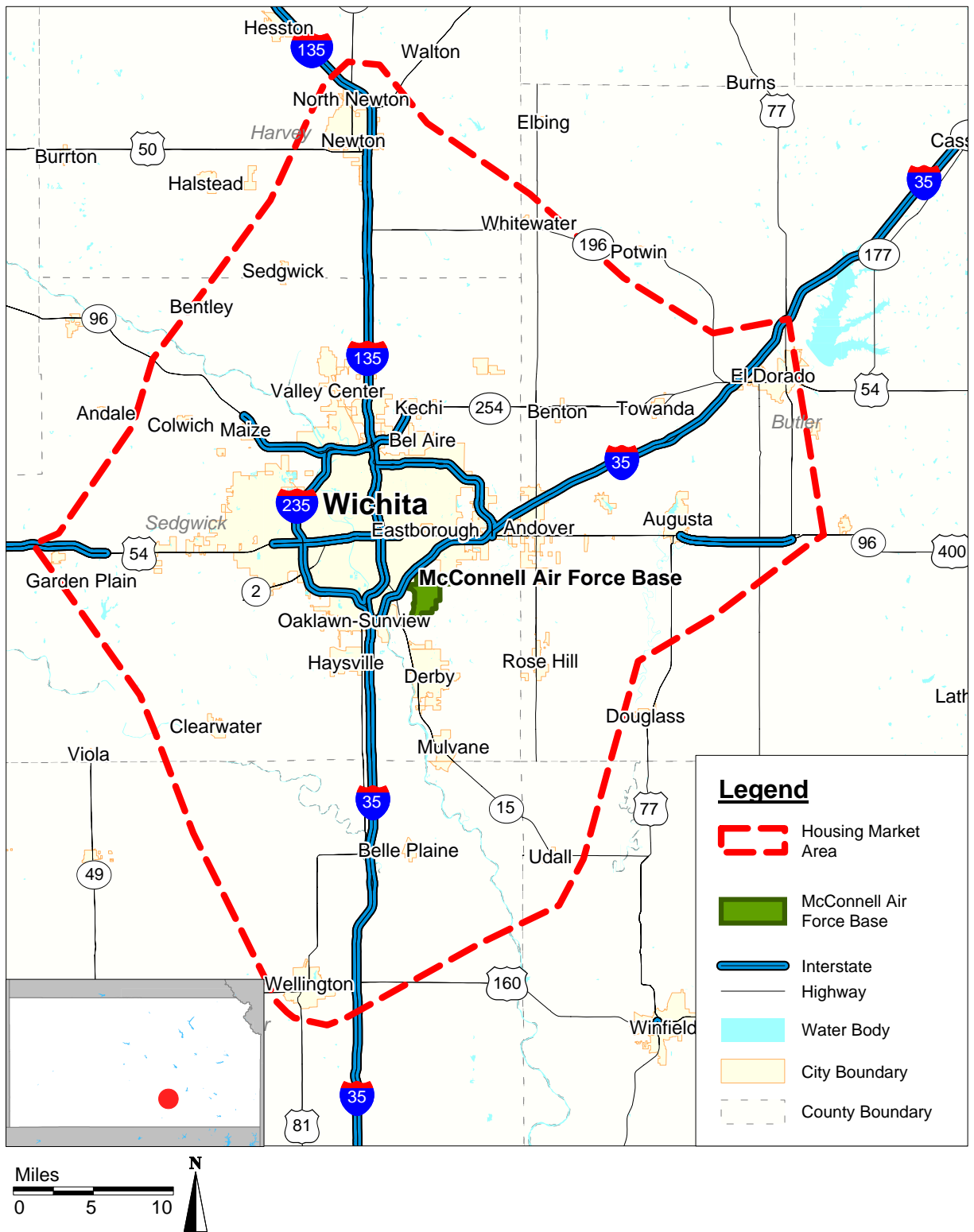
The Total Military Housing Requirement is based on a five-year planning period ending in 2014. In 2014, the installation is projected to support 2,538 personnel who are authorized housing, including 1,422 military families (Table ES-1).

**Table ES-1. Total Military Family Housing Requirement
Summary, Planning Period 2009 - 2014**

	Total
PLANNED MANPOWER	2,538
MILITARY FAMILIES	1,422
Minimum Housing Requirement	147
Private Sector Shortfall	164
TOTAL MILITARY FAMILY HOUSING REQUIREMENT	311

McConnell AFB is located in Sedgwick County, Kansas and is just east of the city of Wichita (Figure ES-1). For the purposes of this HRMA, only housing within the McConnell AFB Housing Market Area can be considered suitable for authorized military personnel. The Wichita area is dependent upon the aerospace manufacturing industry. The recent job losses in that sector are having large effects on the housing market. The rental market vacancy rate has decreased since 2003, but the recent layoffs are expected to result in more vacancies. The homeowner's market has remained stable since 2000, but job losses of the higher salary aerospace employees are threatening to change the trend.

Figure ES-1. McConnell AFB Housing Market Area, 2009



CHANGES IN THE TOTAL HOUSING REQUIREMENT

HRMA results for an installation can vary as market and manpower change over time. A comparison to the previous HRMA analysis conducted for McConnell AFB is presented in Table ES-2.

Table ES-2. Total Military Family Housing Requirement History

Planning Year of HRMA Results	2005 McConnell AFB HRMA	2009 McConnell AFB HRMA	Total Change	Percent Change
PLANNED MANPOWER	3,639	2,538	(1,101)	(30.3%)
MILITARY FAMILIES	1,806	1,422	(384)	(21.3%)
Minimum Housing Requirement	193	147	(46)	(23.8%)
Military Family Homeowners	794	697	(97)	(12.2%)
Military Family Renters	819	578	(241)	(29.4%)
Private Sector Shortfall	248	164	(84)	(33.9%)
TOTAL MILITARY FAMILY HOUSING REQUIREMENT	441	311	(130)	(29.5%)

COMPONENTS OF CHANGE

Changes at the installation and within the housing market impact the Total Housing Requirement (Table ES-3).

Table ES-3. Components of Change from the 2005 McConnell AFB HRMA

MILITARY	HOUSING MARKET
<ul style="list-style-type: none"> ➤ Manpower Authorized personnel for the projected year decreased by 1,101 service members 	<ul style="list-style-type: none"> ➤ Rental Supply Market growth projected at 0.8% compared to 0.7% in the 2005 HRMA
<ul style="list-style-type: none"> ➤ Military Families decreased by 384 ➤ Families Rental Requirement decreased by 241 	<ul style="list-style-type: none"> ➤ Vacancy Rate Decreased to 7.3% from 8.9%
<ul style="list-style-type: none"> ➤ Unaccompanied Personnel decreased by 664 ➤ Unaccompanied Rental Requirement decreased by 320 	<ul style="list-style-type: none"> ➤ Rental Costs Increased 11.7% since the 2005 HRMA ➤ Basic Allowance for Housing (BAH) Increased from 15.1% to 36.3% since 2007

POLICY AND ASSUMPTIONS

In addition to changes in the HRMA parameters, changes in policy or analytical assumptions resulted in significant impacts on the Total Housing Requirements. These changes include:

1. **Methodology** - The 2005 HRMA for McConnell AFB applied the Dynamic Adjustment Model which bases the housing requirement on a hypothetical transition of military families in government-controlled housing in excess of the Minimum “Floor” Housing Requirement to community housing over a five-year period. The current study applies the Static Model as directed by Air Staff.

To determine the housing requirement, this HRMA applies a proportional allocation of military and civilian rental demand to the suitable supply of community rental housing for the projected year of the analysis.

2. **Vacancy Rate** – Vacancy rates are assumed to rise in the projected year due to job losses in the aerospace industry.
3. **Housing Supply** – Homeowner supply growth is expected to remain on trend as the homeowner’s market has shown resilience to economic changes. Rental supply growth is expected to slow as vacancies increase.

TOTAL REQUIREMENT SUMMARY TABLES

Table ES-4. McConnell AFB Total Military Family Housing Requirement

Pay Grade	Military Families	Military Community	Key & Essential	Historic Housing	Minimum Housing Requirement	Private Sector Shortfall	Total Military Housing Requirement
O7+	-	-	-	-	-	-	-
O6	8	1	6	-	6	-	6
O5	43	4	3	-	4	-	4
O4	47	5	-	-	5	2	7
O3	80	8	-	-	8	5	13
O2	25	3	-	-	3	3	6
O1	11	1	-	-	1	-	1
Officers	214	22	9	-	27	10	37
E9	11	1	1	-	1	-	1
E8	31	3	-	-	3	2	5
E7	162	16	-	-	16	10	26
E6	316	32	-	-	32	14	46
E5	360	36	-	-	36	54	90
E4	209	21	-	-	21	45	66
E3	94	9	-	-	9	23	32
E2	12	1	-	-	1	3	4
E1	13	1	-	-	1	3	4
Enlisted	1,208	120	1	-	120	154	274
Total	1,422	142	10	-	147	164	311

Table ES-5. Military Family Private Sector Shortfall

Pay Grade	Number of Bedrooms			Total
	Two	Three	Four+	
O7+	-	-	-	-
O6	-	-	-	-
O5	-	-	-	-
O4	-	2	-	2
O3	3	-	2	5
O2	2	-	1	3
O1	-	-	-	-
Officers	5	2	3	10
E9	-	-	-	-
E8	-	1	1	2
E7	-	6	4	10
E6	5	3	6	14
E5	23	10	21	54
E4	29	9	7	45
E3	19	3	1	23
E2	3	-	-	3
E1	3	-	-	3
Enlisted	82	32	40	154
Total	87	34	43	164

Table ES-6. Total Military Family Housing Requirement

Pay Grade	Number of Bedrooms			Total
	Two	Three	Four+	
O7+	-	-	-	-
O6	-	-	6	6
O5	-	3	1	4
O4	-	6	1	7
O3	8	2	3	13
O2	4	1	1	6
O1	1	-	-	1
Officers	13	12	12	37
E9	-	1	-	1
E8	-	3	2	5
E7	-	19	7	26
E6	19	14	13	46
E5	44	20	26	90
E4	46	12	8	66
E3	27	4	1	32
E2	4	-	-	4
E1	4	-	-	4
Enlisted	144	73	57	274
Total	157	85	69	311

HRMA

Housing Requirements and Market Analysis

United States Air Force

2009 - 2014

McCONNELL AIR FORCE BASE
KANSAS

TABLE OF CONTENTS

<i>Section</i>	<i>Page</i>
1.0 INTRODUCTION.....	1-1
1.1 METHODOLOGY	1-1
1.2 POLICY AND ASSUMPTIONS	1-3
1.3 REPORT ORGANIZATION	1-5
2.0 THE HOUSING MARKET	2-1
2.1 THE HOUSING MARKET AREA	2-1
2.2 REGIONAL ECONOMIC SUMMARY	2-3
2.3 REGIONAL ECONOMIC REVIEW.....	2-4
2.4 HOUSING MARKET CONDITIONS.....	2-8
2.5 MILITARY HOUSING.....	2-13
3.0 MILITARY HOUSING REQUIREMENTS.....	3-1
3.1 AUTHORIZED MANPOWER	3-1
3.2 MILITARY FAMILY HOUSING REQUIREMENTS.....	3-2
3.3 UNACCOMPANIED PERSONNEL HOUSING REQUIREMENTS.....	3-3
4.0 MINIMUM MILITARY HOUSING REQUIREMENTS.....	4-1
4.1 MILITARY FAMILY MINIMUM HOUSING REQUIREMENT	4-1
4.2 UNACCOMPANIED PERSONNEL MINIMUM HOUSING REQUIREMENT	4-3
5.0 COMPETING DEMAND	5-1
5.1 MILITARY FAMILIES REQUIRING RENTAL HOUSING	5-1
5.2 UNACCOMPANIED PERSONNEL REQUIRING RENTAL HOUSING.....	5-5
5.3 CIVILIAN RENTAL DEMAND.....	5-9
6.0 EFFECTIVE RENTAL HOUSING SUPPLY	6-1
6.1 PRIVATE SECTOR HOUSING	6-1
6.2 HOMEOWNER HOUSING SUPPLY	6-1
6.3 EFFECTIVE RENTAL HOUSING SUPPLY	6-2
7.0 TOTAL MILITARY FAMILY HOUSING REQUIREMENT	7-1
7.1 PRIVATE SECTOR SHORTFALL	7-1
7.2 TOTAL MILITARY FAMILY HOUSING REQUIREMENT	7-2
8.0 SUMMARY	8-1
9.0 REFERENCES.....	9-1

LIST OF TABLES

<i>Table</i>	<i>Page</i>
TABLE 2-1. KEY ECONOMIC AND HOUSING MARKET STATISTICS, 2000-2009	2-3
TABLE 2-2. WICHITA MSA POPULATION, EMPLOYMENT, 2000-2008	2-4
TABLE 2-3. WICHITA, KS MSA EMPLOYMENT BY INDUSTRY	2-5
TABLE 2-4. WICHITA, KS MSA TOP EMPLOYERS, 2008.....	2-6
TABLE 2-5. WICHITA, KS MSA PER CAPITA INCOME, 2000-2007	2-6
TABLE 2-6. WICHITA, KS MSA INCOME BY INDUSTRY, 2007	2-7
TABLE 2-7. PRIVATE SECTOR HOUSING IN THE HOUSING MARKET AREA, 2009	2-8
TABLE 2-8. TOTAL RENTAL HOUSING, 2009	2-11
TABLE 2-9. VACANT RENTAL HOUSING, 2009	2-13
TABLE 2-10. MILITARY/PRIVATIZED HOUSING SUPPLY, 2009	2-13
TABLE 3-1. MCCONNELL AFB MANPOWER AUTHORIZATIONS, 2009 & 2014.....	3-1
TABLE 3-2. MCCONNELL AFB MANPOWER DEMOGRAPHICS, 2009 & 2014	3-2
TABLE 3-3. MILITARY FAMILY HOUSING REQUIREMENTS, 2014.....	3-3
TABLE 3-4. UNACCOMPANIED PERSONNEL HOUSING REQUIREMENTS, 2014	3-4
TABLE 4-1. MILITARY COMMUNITY HOUSING REQUIREMENT, 2014	4-2
TABLE 4-2. KEY AND ESSENTIAL HOUSING REQUIREMENT, 2014	4-2
TABLE 4-3. HISTORIC HOUSING REQUIREMENT, 2014.....	4-2
TABLE 4-4. MILITARY FAMILY MINIMUM HOUSING REQUIREMENT, 2014	4-2
TABLE 4-5. UNACCOMPANIED PERSONNEL MINIMUM HOUSING REQUIREMENT, 2014.....	4-3
TABLE 5-1. MILITARY FAMILIES REQUIRING HOUSING, 2014	5-1
TABLE 5-2. MILITARY FAMILIES REQUIRING PRIVATE SECTOR HOUSING, 2014	5-2
TABLE 5-3. HOMEOWNERSHIP RATES FOR MILITARY FAMILIES	5-3
TABLE 5-4. MILITARY FAMILY HOMEOWNER REQUIREMENT, 2014	5-3
TABLE 5-5. MILITARY FAMILY RENTAL REQUIREMENT, 2014.....	5-3
TABLE 5-6. MAHC WITH DEPENDENTS AND MINIMUM HOUSING COST, 2009.....	5-4
TABLE 5-7. MILITARY FAMILY RENTAL REQUIREMENT BY PRICE CATEGORY, 2014	5-5
TABLE 5-8. UNACCOMPANIED PERSONNEL REQUIRING HOUSING, 2014	5-5
TABLE 5-9. UNACCOMPANIED PERSONNEL PRIVATE SECTOR HOUSING REQUIREMENT, 2014 ...	5-6
TABLE 5-10. HOMEOWNERSHIP RATES FOR UNACCOMPANIED PERSONNEL	5-6
TABLE 5-11. UNACCOMPANIED PERSONNEL HOMEOWNER REQUIREMENT, 2014	5-7
TABLE 5-12. UNACCOMPANIED PERSONNEL RENTAL REQUIREMENT, 2014.....	5-7
TABLE 5-13. MAHC WITHOUT DEPENDENTS AND MINIMUM HOUSING COST, 2009.....	5-8
TABLE 5-14. UNACCOMPANIED PERSONNEL RENTAL REQUIREMENT BY PRICE CATEGORY, 2014	5-8
TABLE 5-15. CIVILIAN RENTAL DEMAND, 2014.....	5-9
TABLE 6-1. PRIVATE SECTOR HOUSING IN THE HOUSING MARKET AREA, 2014	6-1
TABLE 6-2. RENTAL HOUSING SUPPLY, 2014	6-2
TABLE 6-3. MINIMUM ACCEPTABLE COSTS BY BEDROOM, 2014	6-5
TABLE 6-4. EFFECTIVE RENTAL HOUSING SUPPLY, 2014.....	6-5
TABLE 7-1. MARKET ALLOCATION OF SUITABLE RENTAL HOUSING.....	7-1
TABLE 7-2. PRIVATE SECTOR SHORTFALL FOR MILITARY FAMILIES	7-2
TABLE 7-3. TOTAL MILITARY FAMILY HOUSING REQUIREMENT SUMMARY	7-3
TABLE 7-4. MILITARY FAMILY PRIVATE SECTOR SHORTFALL	7-3
TABLE 7-5. TOTAL MILITARY FAMILY HOUSING REQUIREMENT	7-3
TABLE 8-1. MILITARY FAMILY HOUSING REQUIREMENT SUMMARY	8-1

LIST OF FIGURES

<i>Figure</i>	<i>Page</i>
FIGURE 1-1. HOUSING REQUIREMENTS AND MARKET ANALYSIS PROCESS SUMMARY	1-2
FIGURE 2-1. MCCONNELL AFB HOUSING MARKET AREA, 2009	2-2
FIGURE 2-3. SINGLE-FAMILY BUILDING PERMITS IN WICHITA, KS MSA, 2000-2009	2-8
FIGURE 2-4. HOMEOWNER PRICE GROWTH FOR WICHITA, KS MSA, 2000-2008.....	2-9
FIGURE 2-5. MULTI-FAMILY BUILDING PERMITS IN WICHITA, KS MSA, 2000-2009	2-10
FIGURE 2-6. RENTAL PRICE GROWTH FOR WICHITA MSA, 2000-2009	2-10
FIGURE 2-7. RENTAL VACANCIES FOR WICHITA MSA, 2000-2009.....	2-12
FIGURE 6-1. AIR FORCE GENERAL SUITABILITY FACTORS.....	6-4

ACRONYMS AND ABBREVIATIONS

AFB	Air Force Base
AFCEE	Air Force Center for Engineering and the Environment
AF/A7CAH	Air Force Housing Division
AHRN	Automated Housing Referral Network
AMC	Air Mobility Command
BAH	Basic Allowance for Housing
BAS	Basic Allowance for Subsistence
BRAC	Base Realignment and Closure
COLA	Cost of Living Adjustment
CONUS	Continental United States
DoD	U.S. Department of Defense
FMR	Fair Market Rent
FY	Fiscal Year
HQ	Headquarters
HRMA	Housing Requirements and Market Analysis
HUD	U.S. Department of Housing and Urban Development
IMRD	Integrated Manpower Requirements Document
K&E	Key and Essential
MAJCOM	Major Command
MAHC	Maximum Allowable Housing Cost
MFH	Military Family Housing
MHA	Military Housing Area
MSA	Metropolitan Statistical Area
OFHEO	Office of Federal Housing Enterprise Oversight
OSD	Office of the Secretary of Defense
PCS	Permanent Change of Station

GLOSSARY OF TERMS

Accompanied Personnel – Military members who are eligible to receive With Dependents housing allowances.

Authorized Civilian Households – Civilian households which are authorized military housing at an installation.

Basic Allowance for Housing (BAH) – The housing allowance paid to eligible members at an installation.

Effective Rental Housing – Rental housing units that are affordable and suitable to the military households and meet their bedroom entitlements.

Floor Housing Requirement – The minimum military housing assets for military families and/or unaccompanied personnel required by an installation by policy determination. Also defined as the Military Family Minimum Housing Requirement for military families and the Unaccompanied Personnel Minimum Housing Requirement for unaccompanied personnel.

Historic Housing – On-base housing units listed on or eligible for the National Register of Historic Places under the National Historic Preservation Act.

Housing Market Area – The geographic area defined by the Air Force for the purposes of determining the Total Military Family Housing Requirement for an installation.

Key and Essential Housing Requirement (K&E) – A criterion for the Minimum Housing Requirement which provides housing for all Key and Essential military and civilian personnel required to live in military housing.

Market Segment – A portion of the rental housing market defined monthly rental costs and the number of bedrooms.

Maximum Allowable Housing Cost (MAHC) – The highest rental cost by Air Force policy that determines the affordability of private sector rental housing for military personnel.

Military Community Housing Requirement – A criterion of the Minimum Housing Requirement whereby ten percent of the military family housing requirement by pay grade is determined to represent a viable military community.

Military Families – Those authorized personnel who are eligible for military family housing at an installation.

Military Family Housing (MFH) Supply – All housing controlled by the U.S. Government for use by military family members at an installation including military owned housing, housing under lease to the Air Force, housing privatized by the Air Force and housing provided overseas by the host country.

Military Family Minimum Housing Requirement – The minimum number of military family housing assets for the installation as defined by policy. Also referred to as the Military Family Floor Housing Requirement.

Military Housing – Government owned or leased family housing and unaccompanied dormitory units available for use by military members.

Military Housing Area – The geographic area that defines the Basic Allowance for Housing for the installation.

Military Households Requiring Housing – Military personnel including accompanied and unaccompanied personnel that an installation has the responsibility to house, either in military housing or in private sector housing.

Military Market Share – The number of rental housing units that are allocated to military households requiring rental housing based on their proportion of the total demand.

Planning Period – The five-year planning horizon incorporated into the HRMA covering, from the initial year to the final year of the analysis.

Private Sector Housing – Housing in the local community that is not owned or leased by a governmental organization.

Private Sector Shortfall – The difference between those military members requiring private sector rental housing and the military market share.

Privatized Housing – Housing units constructed and maintained by the private sector through agreements or partnerships with the U.S. Air Force for primary occupancy by military personnel at the installation.

Restricted Rental Housing – Rental housing units which are generally not available to military personnel due to restrictive requirements such as age and income limits on the rental units.

Service – A military branch of the armed forces of the United States of America.

Student Requirement – Military students required to reside in military housing.

Total Military Family Housing Requirement – The number of family housing units that the U.S. Government must provide in addition to housing available in the private sector to adequately house military families at an installation. The requirement is determined as the sum of the Minimum Housing Requirement plus any shortfall of housing in the private sector on a pay grade basis.

Total Military Housing Requirement – The sum of the minimum housing requirement and the number of military households unsuitably housed in the private sector for the accompaniment status.

Unaccompanied Personnel – Military personnel who have no dependents and who are not married.

Unaccompanied Personnel Minimum Housing Requirement – The minimum unaccompanied housing assets for the installation as defined by policy. Also defined as the Unaccompanied Personnel Floor Housing Requirement.

Vacancy Rate – The number of rental units that are vacant divided by the total rental housing supply.

Voluntary Separations – Military members who are voluntarily separated geographically from family members. Also known as Voluntary Family Separations.

1.0 INTRODUCTION

The Housing Requirements and Market Analysis (HRMA) is a detailed study to determine the quantity and bedroom configuration of military housing the U.S. Government must provide to ensure that all military family households that McConnell Air Force Base (AFB), Kansas has the responsibility to house, have access to acceptable housing.

This report, and the analysis upon which the results are based, follows Air Force guidance implementing the HRMA process as advocated by the Office of the Secretary of Defense (OSD). Adherence to this guidance ensures a consistent determination of housing requirements across military services in support of the planning and programming processes.

This section describes the following:

- Methodology
- Policy and Assumptions
- Report Organization

1.1 METHODOLOGY

The HRMA follows OSD guidance which specifies that military services must rely first on the private sector to meet its housing needs prior to considering military housing. Policy allows for each service to establish a minimum requirement. The Total Military Housing Requirement is determined in part by the number of authorized families and others for whom the installation has the responsibility to house at the end of the five-year planning period. For military families not accommodated in the minimum housing requirement, the HRMA determines whether there is sufficient affordable, suitable private sector housing to meet their needs. The Minimum Family Housing Requirement plus any shortfall of private sector housing within the Housing Market Area determines the installation's Total Military Family Housing Requirement (Figure 1-1).

The minimum housing requirement for unaccompanied personnel is defined by policy by pay grade and length of service of the personnel required to reside in unaccompanied government quarters. The minimum housing requirement for military families is based on three criteria evaluated for the final year of the analysis:

- The need for a military community;
- Housing for personnel in key and essential positions; and,
- Preservation of historic housing.

Figure 1-1. Housing Requirements and Market Analysis Process Summary

- Determine the housing market area based on the greater of a 60-minute commute or 20 miles from the installation's headquarters building or major work centers.
- Apply the *Integrated Manpower and Requirements Document* (IMRD) for determining the military families and unaccompanied personnel requiring housing for the final year of the planning period.
- Determine the Military Family Minimum Housing Requirement:
 - Military Community
 - Key and Essential
 - Historic Housing
- Determine the Unaccompanied Personnel Minimum Housing Requirement.
- Determine the potential private sector requirement as the number of military families and unaccompanied personnel households in excess of their minimum housing requirements in the fifth year of the planning period.
- Determine the competing demand actively seeking available suitable rental housing.
- Determine the effective rental supply for the last year of the planning period.
- Compute the military market allocation for each military segment:

$$\text{Military Market Share} = \frac{\text{Competing Military Demand}}{\text{Total Competing Demand}} \times \text{Suitable Supply}$$

- Compare the military market allocation to the military rental requirement to determine a Private Sector Shortfall, if any, in the final year of the planning period.
- Establish the Total Military Family Housing Requirement as the sum of the Minimum Housing Requirement and any Private Sector Shortfall.

Private sector rental housing is assessed separately from owner-occupied housing. Military members who own their home are considered suitably housed. The homeowner market is otherwise not addressed if it is viable and responsive.

The sufficiency of the rental housing market is determined by comparing the military market share of suitable housing to the number of families and unaccompanied personnel requiring housing. An allocation process is used in which military families, unaccompanied personnel, and civilians who are in the rental market in the final year of the five-year planning period each receive a proportional market share of the affordable, suitable rental housing.

In making its determination of market sufficiency, the analysis distinguishes between the total rental housing supply and rental housing that is affordable and

suitable for military personnel. The criteria for affordable, suitable rental housing includes location in the housing market area, health and safety considerations, acceptable unit type, and military housing allowances. The analysis divides the rental market into market segments by rental cost (rent, utility costs, and renter's insurance) and number of bedroom categories. The suitable housing allocated to the military families within each market segment is the proportion of affordable, suitable housing in that segment equal to the proportion of the military families to the total competing housing demand within the market segment. This allocation becomes the market share for military families.

To determine if there is sufficient private sector housing, the market share for military families is compared to their respective private sector rental housing requirement in each market segment. A private sector rental requirement in excess of allocated suitable rentals in a market segment constitutes a shortfall for the military families in that market segment. The sum of the shortfalls for each market segment is the Private Sector Shortfall.

The final step of the HRMA methodology is determining the Total Military Family Housing Requirement. The Total Military Family Housing Requirement is the sum of the Military Family Minimum Housing Requirement, and the Private Sector Shortfall, if any, in the final year of the planning period.

1.2 POLICY AND ASSUMPTIONS

The following critical policies and assumptions are used in this HRMA.

1.2.1 METHODOLOGY

This HRMA applies a methodology that determines a proportional market share for military households based on the suitable housing available for rent and the number of civilian and military households seeking rental housing.

1.2.2 HOUSING SUPPLY

Only housing within the Housing Market Area is considered in the analysis. The Housing Market Area is based on the greater of either a 60-minute commute or 20 miles from the installation's headquarters building or major work centers.

The number of rental housing units and the distribution of housing by number of bedrooms and rent categories are based on the 2000 U.S. Census, residential construction permits, and other data. Rental housing includes only units on less than ten acres of land for which cash rent is paid and excludes seasonal rental housing.

1.2.3 HOUSING SUITABILITY

Only housing within the housing market area is considered suitable for military personnel. Additionally, suitable housing must be located in areas suitable for military members based on health and safety considerations, of an acceptable unit type, and above a minimum quality. Discussions with McConnell AFB housing personnel, interviews with local property managers and realtors, surveys of the local community, and other published data were utilized in the housing suitability determination process.

All homeowner-occupied housing, with the exception of mobile homes, is considered suitable housing for military personnel.

1.2.4 HOUSING DEMAND

Civilian demand estimates are based on population and economic projections for the region, census information, residential construction permit data, and other factors.

Military family housing requirements are based on manpower authorizations projected for the final year of the planning period.

The methodology assumes that in the final year of the planning period, military families will occupy government-provided or privatized housing that fulfills the Minimum Housing Requirement. Military families in excess of the Minimum Housing Requirement would require private sector housing for the purpose of the HRMA analysis.

1.2.5 RENTAL RATES

Rental costs are assumed to remain constant for the duration of the five-year planning period based on the assumption that the Basic Allowance for Housing (BAH) rates will appropriately track rental housing costs.

1.2.6 MILITARY HOUSING AFFORDABILITY

The Maximum Allowable Housing Cost (MAHC), the upper limit of affordability for housing for each pay grade, is set to the local median housing cost for that pay grade (BAH) as determined by the Per Diem, Travel and Transportation Allowance Committee. For the purposes of this analysis, MAHC and BAH are held constant over the five-year planning period.

1.2.7 MILITARY HOUSING SUPPLY

As provided by McConnell AFB, currently there are 493 MFH units with the inventory to reach 357 units in 2014.

1.2.8 MILITARY HOUSING REQUIREMENTS

Military family housing requirements are the number of families that the installation has the responsibility to house. The number of families in the final year of the planning period is drawn from the *2009 Integrated Manpower and Requirements Document (IMRD)*.

Bedroom entitlements are based on family characteristics of personnel currently assigned to the installation with each dependent child having a bedroom and a minimum bedroom entitlement based on military member's rank. For unaccompanied personnel, those in grades E4 (three or more years of service) and above require private sector housing.

The number of military family and unaccompanied personnel homeowners are based on the Air Force Housing Survey conducted for McConnell AFB between May and July 2009.

Military personnel currently residing in government-owned or leased housing or privatized housing are assumed to become renters if required to live in the private sector.

1.3 REPORT ORGANIZATION

This HRMA for McConnell AFB is presented in the following chapters:

- Chapter 2. The Housing Market
- Chapter 3. Military Housing Requirements
- Chapter 4. Minimum Military Housing Requirements
- Chapter 5. Competing Demand
- Chapter 6. Effective Rental Housing Supply
- Chapter 7. Private Sector Shortfall
- Chapter 8. Total Military Housing Requirement
- Chapter 9. References

2.0 THE HOUSING MARKET

The Housing Market Area sets the geographic limits of the HRMA analysis. Only the housing within the Housing Market Area is considered in determining the Total Military Housing Requirement for McConnell AFB. This chapter describes the Housing Market Area and the current housing market conditions and regional factors that impact the future housing supply available to military households in the following sections:

- The Housing Market Area
- Regional Economic Summary
- Regional Economic Review
- Housing Market Conditions
 - Market Trends
 - Homeowner Housing Supply
 - Rental Housing Supply
- Military/Privatized Housing

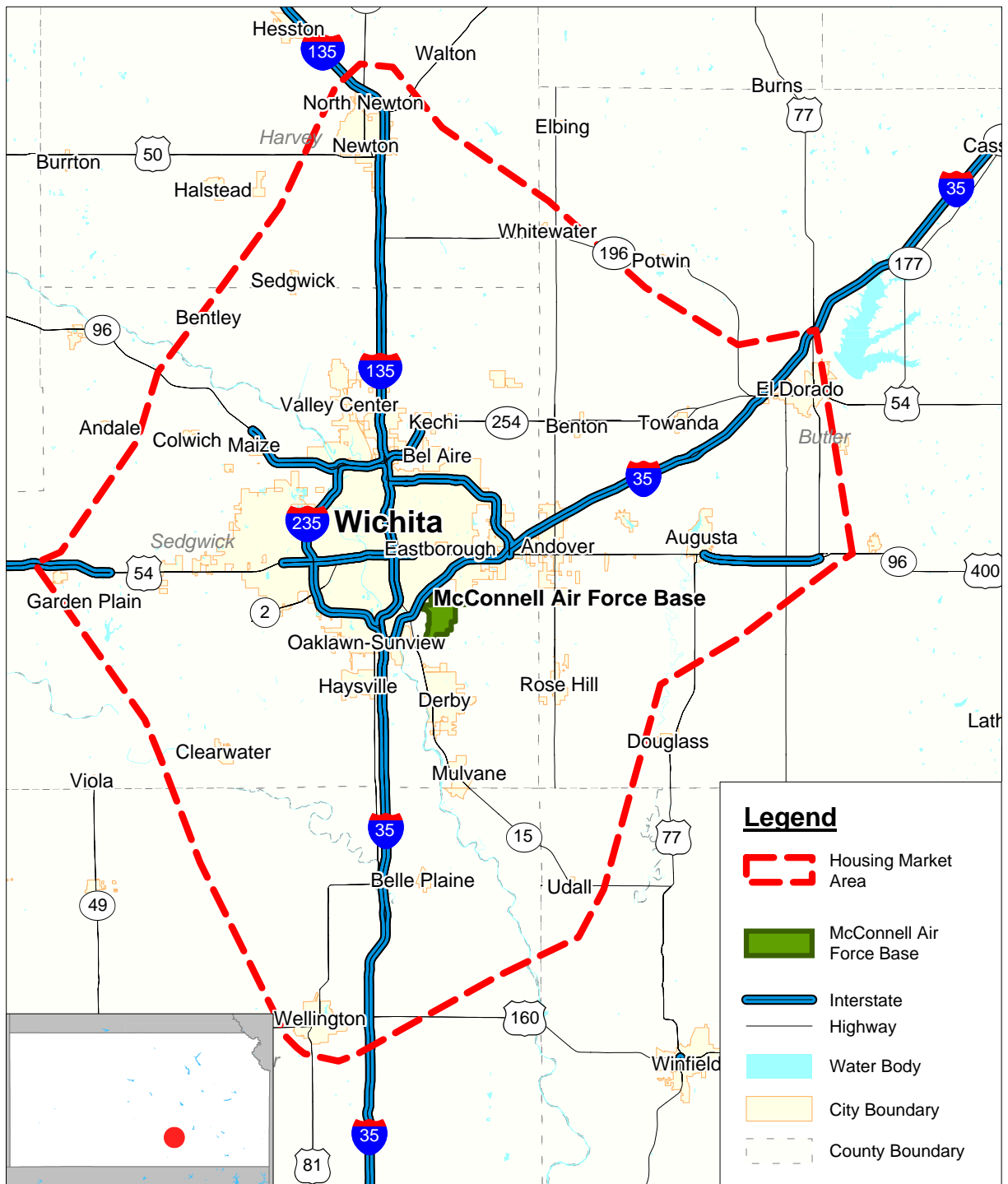
2.1 THE HOUSING MARKET AREA

The Housing Market Area for McConnell AFB is defined by the greater of either a one-hour commute or twenty miles distance originating from the installation's headquarters building during peak traffic in privately owned vehicles assuming normal weather conditions.

McConnell AFB is located in Sedgwick County, Kansas, on the outskirts of the city of Wichita. The Wichita Metropolitan Statistical Area (MSA) constitutes a large portion of the market area. The boundary of the McConnell AFB Housing Market Area can be described as follows (Figure 2-1):

- The northwest boundary stretches from Garden Plain to Newton, including the cities of Andale and Bentley on the boundary;
- The northeast portion is located along the cities of Newton and El Dorado;
- The boundary to the southeast includes the City of Udall to the southernmost city of Wellington;
- The southwest boundary stretches from Wellington to Garden Plain, and includes Clearwater.

Figure 2-1. McConnell AFB Housing Market Area, 2009



2.2 REGIONAL ECONOMIC SUMMARY

The conditions of the economy play a role in shaping the housing market. These factors include changes in population, employment, and income. A brief overview of the economy of the Wichita, Kansas Metropolitan Statistical Area (MSA) is provided to give context to the housing situation. Table 2-1 shows some of the more important economic indicators and housing trends in annual terms.

Table 2-1. Key Economic and Housing Market Statistics, 2000-2009

Annual Economic Changes		Annual Housing Changes	
▪ Population Growth:	0.9%	▪ Homeowner Supply:	6.5%
▪ Employment Growth:	0.7%	▪ Homeowner Price:	2.9%
▪ Income Growth:	4.8%	▪ Rental Supply:	1.2%
		▪ Rental Price:	1.5%

The McConnell AFB Housing Market Area centers on Wichita, the largest provider of both housing and employment. Population in the area has seen mostly steady growth with 0.9 percent growth annually. The Wichita economy's largest and most important industry is general aviation manufacturing. With three of the top ten largest employers within that sector, general aviation drives the economy. Additionally, 26.0 percent of earned income in 2007 was attributed to aviation manufacturing. Recently, aviation has seen a large downsize at the factories, with about 8,000 jobs cut according to the Wichita State University's (WSU) Center for Economic Development and Business Research (CEDBR). However, the expectations are that the cuts are temporary until the factories start increasing production. The aviation manufacturers have large backlog orders, and if those orders are continued, then the expectation is that the jobs will return.

The Wichita economy has been relatively unaffected by the housing bubble, as lending practices in the area have been more conservative than in other parts of the nation. The WSU Center for Real Estate (CRE) projects that homeowner prices will actually appreciate for this year. The rental market has been sagging recently, with some local property managers indicating that prices are declining for the first time since 2001. The aviation layoffs have slowed the market, increasing the time it takes to fill a vacant unit. If the trends from the previous downturn hold, then the recovery period will take a few years as demand for general aviation returns. Longer term layoffs will cause some discouraged workers to move in search of employment elsewhere and create a demand shortage for housing, causing increased rental vacancies and a corresponding price drop. This will create a situation in which the military will enjoy increased purchasing power and selection, thereby increasing the military's capture rate.

2.3 REGIONAL ECONOMIC REVIEW

The next section provides a more detailed look of the McConnell AFB Housing Market Area and the economic components that affect the housing market.

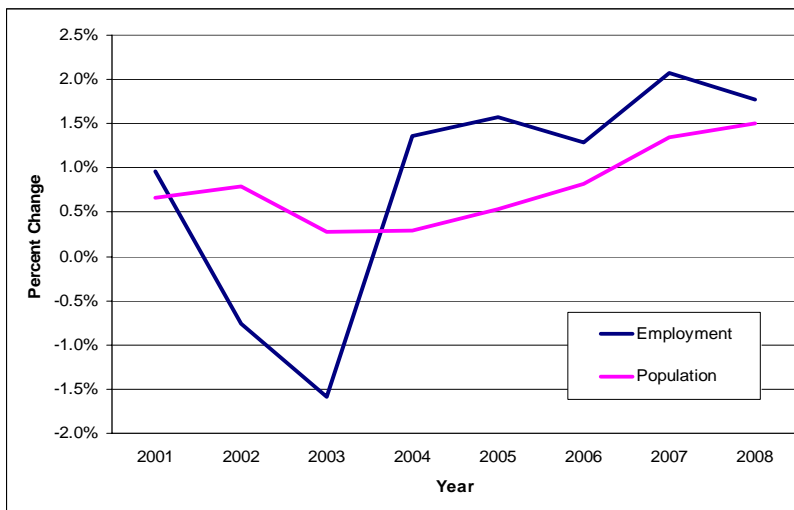
The population of Wichita has grown at about 0.4 percent annually since 2000 (Table 2-2). Employment has increased 0.7 percent annually over the same period, experiencing greater volatility. Growth in employment and population coincide with each other, demonstrated by Figure 2-1. Negative growth in employment, as in 2002 and 2003, will have a corresponding negative impact on growth, especially outmigration. Two days after September 11, 2001, Boeing announced it would cut 5,200 jobs in Wichita, with Bombardier Aerospace and Raytheon Aircraft Company also announcing job cuts. The job losses severely impacted the area, and cause a prolonged downturn that took the area a few years from which to recover. Currently, Wichita is experiencing much of the same, with Cessna cutting 5,300 jobs and Hawker Beechcraft cutting 2,300 jobs among others.

Table 2-2. Wichita MSA Population, Employment, 2000-2008

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Population	545,220	548,862	553,222	554,749	556,374	559,369	563,918	571,499	580,100
Net Migration	-	-1,312	778	-1,879	-1,954	-672	543	2,562	3,464
Percent Change	-	0.7%	0.8%	0.3%	0.3%	0.5%	0.8%	1.3%	1.5%
Employment	286,604	289,354	287,147	282,578	286,406	290,900	294,631	300,754	306,077
Percent Change	-	1.0%	-0.8%	-1.6%	1.4%	1.6%	1.3%	2.1%	1.8%

Source: U.S. Census Bureau, 2008; Bureau of Labor Statistics, 2009

Figure 2-1. Wichita MSA Change in Employment and Population, 2001-2007



Source: U.S. Census Bureau, 2008; Bureau of Labor Statistics, 2009

Employment in the Wichita MSA relies heavily on manufacturing, which is estimated to account for 21.7 percent of all employed in 2008 (Table 2-3). The Kansas Department of Labor shows job losses for Wichita between 2008 and 2009, mostly in the aerospace manufacturing industry. The aerospace job losses between April 2008 and April 2009 were about 4,800, with nearly 4,000 additional cuts expected from the CEDBR. Current losses are due to a slowdown in corporate jet construction. The CEDBR claims that overseas demand, a large component of purchases, has fallen and caused companies such as Cessna and Hawker Beechcraft to cut back on workers.

The previous downturn from 2001 to 2003 is similar in composition to the current recession. The 2001 recession was caused by a precipitous decline in commercial jet demand, which caused a cut in labor force at Boeing. At the time, Boeing was the largest employer in Wichita. Currently, the decline in demand for corporate jets is forcing the industry to once again cut its workforce, with Cessna leading the way. In 2008, Cessna was the largest employer, but due to recent cuts, Cessna is no longer largest employer in Wichita.

Table 2-3. Wichita, KS MSA Employment by Industry

Industry	2001	2002	2003	2008	2009
Total Nonfarm	301,100	296,100	283,000	308,800	305,100
Nat. Resources & Construction	16,500	15,900	15,900	16,600	15,700
Manufacturing	73,500	66,600	59,300	67,500	63,100
Aerospace Product & Parts	45,900	39,600	33,200	41,100	36,300
Trade, Transportation & Utilities	50,300	50,200	48,700	51,600	51,500
Information	7,200	7,200	6,500	6,300	5,400
Financial Activities	13,000	13,000	12,700	11,500	11,600
Professional and Business Services	28,600	27,900	25,900	30,800	30,700
Educational and Health Services	36,400	38,800	38,000	43,300	45,200
Leisure and Hospitality	26,000	25,600	24,900	28,500	28,100
Other Services	10,700	11,400	11,300	11,100	10,800
Government	38,900	39,500	39,800	41,600	43,000

Source: Kansas Department of Labor, 2009

The Wichita area is heavily reliant on the aircraft manufacturing industry. Four of the top ten employers in the Wichita area work with aircraft manufacturing, totaling 31,972 employees (Table 2-4). These companies are involved in either parts for aircraft or building the aircraft themselves. The top three employers are Cessna Aircraft Company, Spirit AeroSystems, and Hawker Beechcraft. The correlation between the aircraft manufacturing industry and the general economic health of the area is best illustrated from the order backlogs for aircraft manufacturers. “Wichita’s Economic Outlook 2008 Review and 2009 Forecast” from the CEDBR states that 2007 was the largest year for order backlogs with 1,422 backlog orders for Boeing, about 400 more than the previous year, and Airbus with 1,458 backlog orders, more than 600 over the previous year. Not coincidentally, 2007 was the largest percent increase in employment and had the

lowest unemployment level since 2000. The CRE states that employment levels will depend on “whether the strong backlog of aircraft orders holds firm” during the economic downturn.

Table 2-4. Wichita, KS MSA Top Employers, 2008

Company	Product/Service	Employees
Cessna Aircraft Company	Aircraft	11,300
Spirit AeroSystems	Aircraft Parts	10,900
Hawker Beechcraft	Aircraft	6,767
Unified School District 259 - Wichita	Public Primary Education	5,391
Via Christi Health System	Health Care	4,809
State of Kansas	State Government	4,094
City of Wichita	Municipal Government	3,103
Boeing Integrated Defense System	Aircraft Modification	3,005
Sedgwick County	County Government	2,763
United States Government	Federal Government	2,524

Source: Greater Wichita Economic Development Coalition, 2009

Per capita income growth for Wichita has fluctuated between -0.1 percent to 10.1 percent annual growth (Table 2-5). Income saw the lowest percent change between 2002 and 2003, when the area experienced the large layoffs that started with the 5,200 Boeing layoffs in late 2001. The large cuts in the job supply led to an excess demand for jobs, thus lowering the wage rate. The job cuts turned out not to be short term cuts and the jobs at Boeing never returned. Out-migration occurred as workers moved on to find jobs elsewhere. If the current situation transpires similarly to the past downturn, then out migration is expected.

Table 2-5. Wichita, KS MSA Per Capita Income, 2000-2007

	2000	2001	2002	2003	2004	2005	2006	2007
Per Capita Income	\$27,828	\$29,935	\$29,896	\$30,245	\$32,219	\$33,695	\$37,115	\$38,552
Percent Change	-	7.6%	-0.1%	1.2%	6.5%	4.6%	10.1%	3.9%

Source: Bureau of Economic Analysis, 2008

Wichita residents’ reliance on the Aerospace industry is exemplified further in Table 2-6. Aerospace manufacturing accounts for over a quarter of the total income in the Wichita, KS MSA. Large cuts in aerospace manufacturing have a negative impact on the amount of wages earned in Wichita, which could potentially affect the homeowner and rental housing markets by decreasing the number of people able to afford higher end housing.

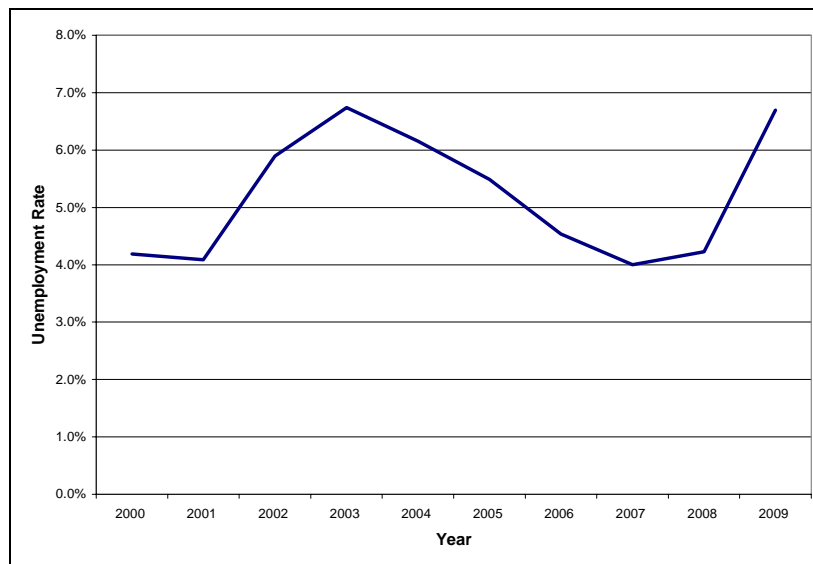
Table 2-6. Wichita, KS MSA Income by Industry, 2007

Industry	Total Wages	Employment	Annual Average Salary	Percent of Total Wages
All Industries	\$11,718,872,816	295,023	\$39,722	100.0%
Natural Resources and Mining	\$76,442,991	1,423	\$53,720	0.7%
Construction	\$620,490,967	15,773	\$39,339	5.3%
Manufacturing	\$3,888,406,501	65,434	\$59,425	33.2%
Aerospace Product and Parts	\$3,051,221,952	37,952	\$80,397	26.0%
Trade, Transportation & Utilities	\$1,646,779,686	51,225	\$32,148	14.1%
Information	\$256,889,470	6,328	\$40,596	2.2%
Financial Activities	\$470,942,905	11,479	\$41,026	4.0%
Professional & Business Services	\$1,324,576,340	29,754	\$44,518	11.3%
Education & Health Services	\$1,472,280,422	40,299	\$36,534	12.6%
Leisure & Hospitality	\$352,164,174	27,769	\$12,682	3.0%
Other Services	\$176,223,675	6,792	\$25,946	1.5%
Government	\$1,433,675,685	38,747	\$37,001	12.2%

Source: Wichita State University, 2008

At 6.8 percent, unemployment in Wichita has risen to levels not reached since the previous downturn in 2000 (Figure 2-2). If unemployment rates continue to climb, then the labor force will contract, with workers seeking employment opportunities elsewhere. Indications are that unemployment will continue to rise as layoffs from the aviation industry continue.

Figure 2-2. Wichita, KS MSA Unemployment, 2000- 2009



Source: Bureau of Labor Statistics, 2009

2.4 HOUSING MARKET CONDITIONS

Private sector housing includes both homeowner housing as well as rental housing within the Housing Market Area. In 2009, there are an estimated 275,989 private sector housing units in the Housing Market Area (Table 2-7). The current private sector housing inventory includes 161,950 homeowner units and 114,039 rental units.

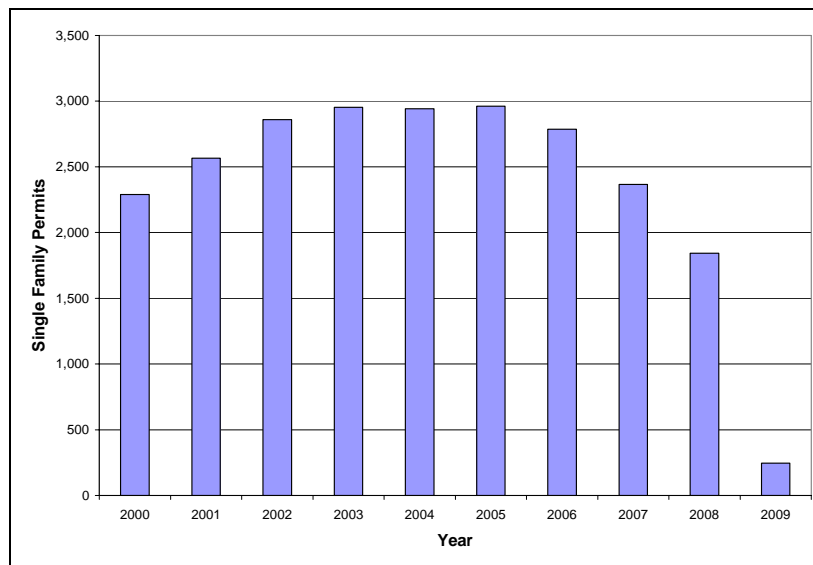
Table 2-7. Private Sector Housing in the Housing Market Area, 2009

Housing Ownership	2009
Homeowner Housing	174,710
Rental Housing	51,622
Vacant Units	5,167
Total	226,332

2.4.1.1 Homeowner Market

The Department of Housing and Urban Development (HUD) single family building permits data shows that the Wichita homeowner's market has grown at an average annual rate of 6.5 percent (Figure 2-3). Single family permits peaked between 2003 and 2005 and have decreased each year after 2005. According to the CRE from WSU, the housing market has largely been unaffected by the losses in the Aviation manufacturing sector. The CRE is projecting price appreciation through the year.

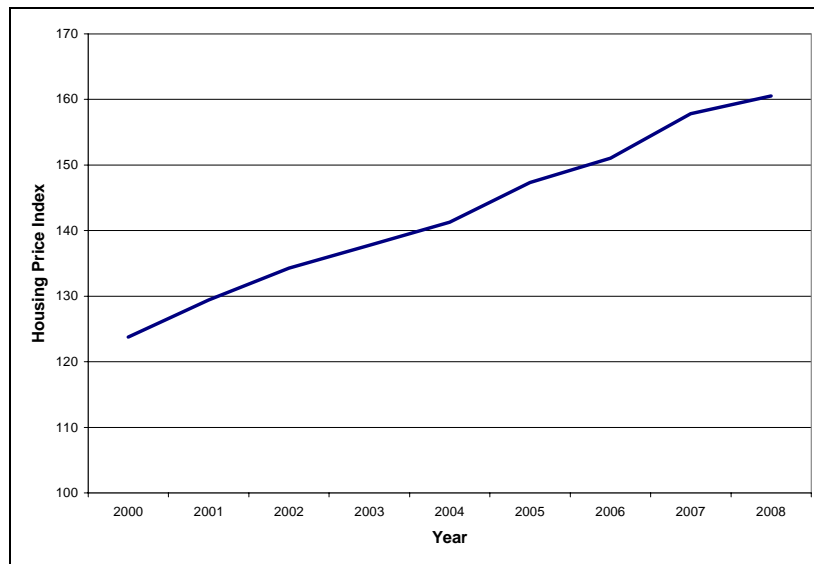
Figure 2-3. Single-Family Building Permits in Wichita, KS MSA, 2000-2009



Source: HUD SOCDs, 2009

The WSU Center for Real Estate asserts that the strong local economy has kept the real estate market more stable, with home prices in Wichita continuing to climb over the last year, but the current downturn is starting to take hold in Wichita, slowing home price growth. Price growth in Wichita has remained stable from 2000 through 2008. The CRE indicated that lending practices for the Wichita area have been more conservative than the rest of the nation, which has kept the housing market from forming a price bubble. According to the Federal Housing Finance Agency, homeowner housing costs have grown at 2.9 percent annually since 2000 (Figure 2-4). The CRE claims that the area where national problems have been affecting the local market is in the availability of credit. Banks have now tightened the restrictions on mortgages and this is keeping buyers, who were once able to receive a loan, out of the market. The CRE also indicates a vacating of the market by both buyers and sellers, which is keeping homeowner houses from declining in prices. Homeowner prices continued to grow during the previous recession, showing the resilience of the homeowner market to employment, population, or income shocks that impact demand. The CRE expects homeowner housing to appreciate through the year.

Figure 2-4. Homeowner Price Growth for Wichita, KS MSA, 2000-2008

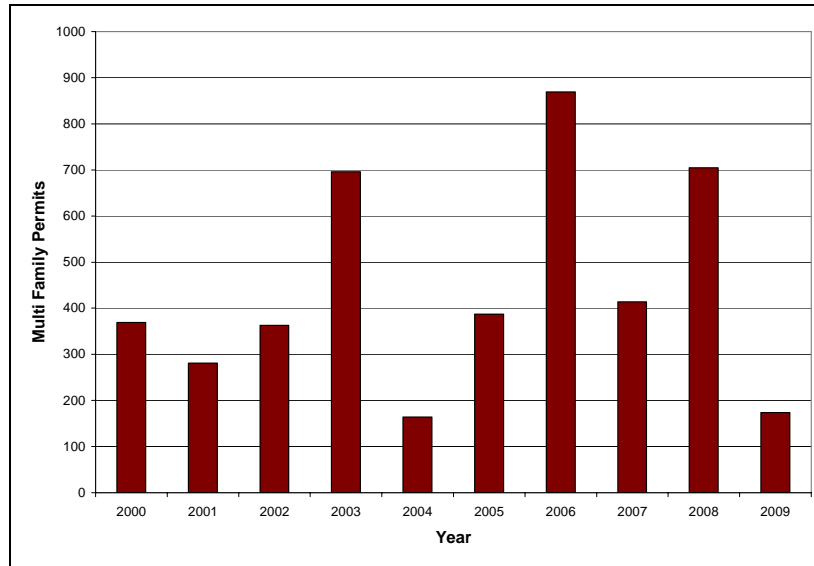


Source: FHFA, 2009

2.4.1.2 Rental Market

Multi-family building permits grew about 1.2 percent annually from 2000 to 2009. Growth has been variable, with as many as 960 permits and as low as 160 permits (Figure 2-5). The “Comprehensive Housing Market Analysis” published by HUD asserts that rental supply should meet demand for the next three years. If the aviation industry job losses are permanent, then some of the higher end demand could shift to lower end units or demand could leave the market entirely. The military typically competes for mid to higher range units. A decrease in demand for those units would increase the likelihood that the military would be able to secure the mid to higher range units.

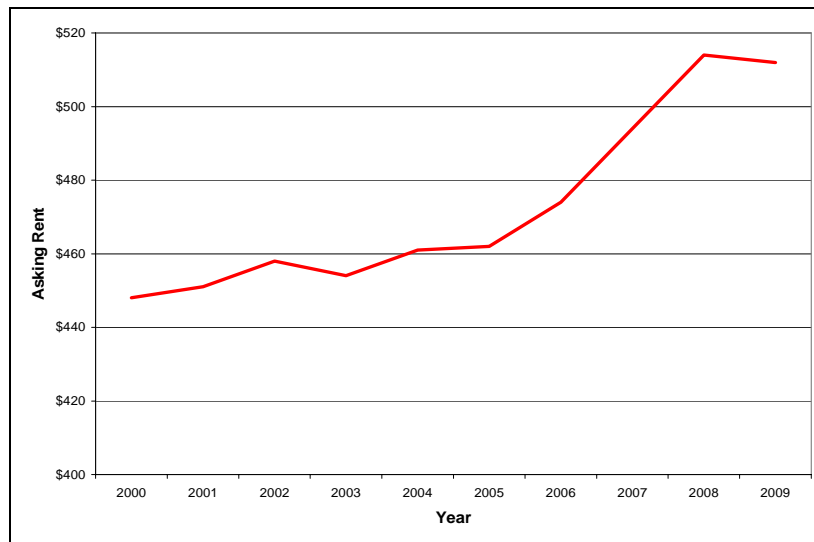
Figure 2-5. Multi-Family Building Permits in Wichita, KS MSA, 2000-2009



Source: HUD SOCDs, 2009

Rental prices have escalated at an increasing rate from 2000 to 2008 (Figure 2-6). Recently the prices have had a pullback as the layoffs in the aviation industry have begun to take effect. REIS, Inc data is supported by local rental agencies, as some have stated that prices have declined for the first time since 2002. With the current situation in an industry as dominant as the aviation industry, a decline in prices is expected. If the Basic Allowance for Housing (BAH) remains at its current level or increases, then military members will be able to rent a higher quality living space than the BAH previously allowed.

Figure 2-6. Rental Price Growth for Wichita MSA, 2000-2009



Source: REIS, Inc., 2009

2.4.2 HOMEOWNER HOUSING SUPPLY

All owner-occupied housing is considered suitable for military personnel with the exception of mobile homes. There are no impediments to the continued growth of owner-occupied housing. As such, this HRMA does not explicitly address the sufficiency of the homeowner market.

2.4.3 RENTAL HOUSING SUPPLY

The total rental supply is based on the trends in supply growth and price changes from the 2000 Census baseline data. For the purposes of the HRMA, the rental supply consisted only of specified housing units - those rental units for which cash rent is paid and are located on less than ten acres.

The total 2009 rental housing in the Housing Market Area is estimated at 114,039 units. Two-bedroom and smaller units make up 83.3 percent of rental housing supply. Three-bedroom units make up 13.5 percent of rental housing and the remaining 3.2 percent have four or more bedrooms (Table 2-8).

The total rental supply includes housing the military members are generally not able to obtain, such as rental units restricted by incomes or age requirements. Often for low income housing, if the military member is eligible, waiting times to access the housing effectively makes the housing unavailable to the member. There are no rental units in the Housing Market Area that target a subset of the rental demand through eligibility restrictions (i.e., income and age restricted housing) that are not considered as part rental housing supply for military households for the purposes of the HRMA.

Table 2-8. Total Rental Housing, 2009

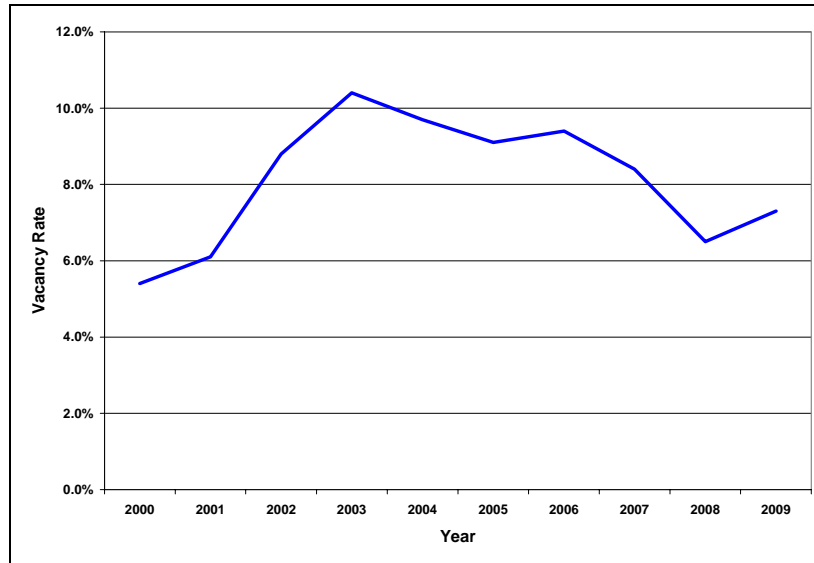
Rental Cost ¹	Number of Bedrooms					Total
	None	One	Two	Three	Four+	
\$1,700 & Above	53	206	226	414	137	1,036
\$1,600 - \$1,699	6	24	27	52	12	121
\$1,500 - \$1,599	6	25	27	53	12	123
\$1,400 - \$1,499	19	71	90	151	37	368
\$1,300 - \$1,399	33	123	155	250	60	621
\$1,200 - \$1,299	33	123	155	250	60	621
\$1,100 - \$1,199	30	140	454	518	125	1,267
\$1,000 - \$1,099	39	219	858	914	220	2,250
\$900 - \$999	59	335	1,256	1,336	320	3,306
\$800 - \$899	114	937	2,962	1,388	331	5,732
\$700 - \$799	201	1,720	5,237	2,017	482	9,657
\$600 - \$699	272	2,331	7,044	2,729	655	13,031
Below \$600	4,368	21,092	12,367	2,972	678	41,477
Total	9,054	45,393	40,592	15,344	3,656	114,039

¹ Includes rent, utility costs, and renter's insurance

2.4.3.1 Rental Housing Vacancies

Rental vacancy rates in the market are important in assessing the availability of rental housing for military personnel. According to REIS, Inc., the rental vacancy rate for the Wichita, KS MSA is 7.3 percent in the beginning of 2009. The long-term vacancy rate is 8.1 percent (Figure 2-7). The long-term vacancy rate is based on Wichita, KS MSA historical data from REIS, Inc.

Figure 2-7. Rental Vacancies for Wichita MSA, 2000-2009



Source: REIS, Inc.

There are currently an estimated 8,312 vacant rental units in the Housing Market Area with an estimated vacancy rate at 7.3 percent (Table 2-9).

Table 2-9. Vacant Rental Housing, 2009

Rental Cost ¹	Number of Bedrooms					Total
	None	One	Two	Three	Four+	
\$1,700 & Above	4	16	18	31	10	79
\$1,600 - \$1,699	-	2	2	4	1	9
\$1,500 - \$1,599	-	2	2	4	1	9
\$1,400 - \$1,499	1	5	7	11	3	27
\$1,300 - \$1,399	3	9	11	19	5	47
\$1,200 - \$1,299	2	9	12	19	5	47
\$1,100 - \$1,199	2	10	34	39	9	94
\$1,000 - \$1,099	3	16	64	68	17	168
\$900 - \$999	4	25	94	100	24	247
\$800 - \$899	9	70	222	105	25	431
\$700 - \$799	15	129	393	152	36	725
\$600 - \$699	20	175	528	205	49	977
Below \$600	327	1,583	927	223	52	3,112
Total	651	3,276	2,976	1,137	272	8,312

2.5 MILITARY HOUSING

The total housing supply at McConnell AFB is currently 493 MFH units (Table 2-10). Privatized housing units are constructed and maintained by the private sector for primary occupancy by military personnel at the installation. McConnell AFB currently does not have any privatized housing units.

Table 2-10. Military/Privatized Housing Supply, 2009

Inventory	Total
Military Owned or Leased	-
Privatized Housing Supply	493

3.0 MILITARY HOUSING REQUIREMENTS

This chapter reports the number of military families and unaccompanied personnel requiring housing at McConnell AFB in the following sections:

- Authorized Manpower
- Military Family Housing Requirements
- Unaccompanied Personnel Housing Requirements

3.1 AUTHORIZED MANPOWER

Authorized manpower includes all personnel that the housing office has the responsibility to house. Authorized manpower is 2,693 in 2009 and 2,538 personnel by 2014 (Table 3-1). Current manpower authorizations are based on AMC and McConnell AFB data. Projected manpower and pay grade distribution are from the AF/A7CAH 2009 IMRD.

Table 3-1. McConnell AFB Manpower Authorizations, 2009 & 2014

Pay Grade	Current	Projected
	Year, 2009	Year, 2014
	Total	Total
O7+	-	-
O6	7	8
O5	49	48
O4	64	65
O3	158	152
O2	70	69
O1	29	29
Officers	377	371
E9	15	14
E8	40	38
E7	217	205
E6	429	395
E5	582	555
E4	533	502
E3	397	362
E2	51	47
E1	52	49
Enlisted	2,316	2,167
Total	2,693	2,538

Military family housing requirements are based on the number of military families (Table 3-2). The IMRD provides estimates of the number of military families and unaccompanied personnel. These estimates are based on historical average demographics for McConnell AFB and incorporate military married to military households, single personnel with dependents, and personnel voluntarily separated from their dependents.

**Table 3-2. McConnell AFB
Manpower Demographics, 2009 & 2014**

	Current Year, 2009	Projected Year, 2014
Total Authorized	2,693	2,538
Military Families	1,504	1,422
Unaccompanied Personnel	850	797

3.2 MILITARY FAMILY HOUSING REQUIREMENTS

Military family housing requirements are the number of military families that the installation has the responsibility to house. Military family housing requirements are based on the grade, family size, and composition of household. Bedroom requirements are based on one bedroom per dependent child and a minimum bedroom requirement by rank. Junior enlisted and company grade officer families require a minimum of a two-bedroom unit, while families of senior noncommissioned officers and field grade officers require a minimum of a three-bedroom unit and senior officers require a minimum of a four-bedroom unit. The family size is estimated from the composition of the personnel currently assigned to the installation.

In 2009, there are 1,504 military families that require housing. There are 1,422 military families projected to require housing for 2014 (Table 3-3). Approximately 49.2 percent of the families are entitled to two-bedroom housing while 35.3 percent have a three-bedroom requirement and 15.5 percent have a four or more bedroom requirement.

Table 3-3. Military Family Housing Requirements, 2014

Pay Grade	Number of Bedrooms			Total
	Two	Three	Four+	
O7+	-	-	-	-
O6	-	-	8	8
O5	-	28	15	43
O4	-	38	9	47
O3	49	18	13	80
O2	19	5	1	25
O1	11	-	-	11
Officers	79	89	46	214
E9	-	9	2	11
E8	-	25	6	31
E7	-	128	34	162
E6	135	107	74	316
E5	210	103	47	360
E4	166	33	10	209
E3	85	8	1	94
E2	12	-	-	12
E1	13	-	-	13
Enlisted	621	413	174	1,208
Total	700	502	220	1,422

3.3 UNACCOMPANIED PERSONNEL HOUSING REQUIREMENTS

Unaccompanied personnel housing requirements are the number of unaccompanied households that the installation housing office has the responsibility to house. Bedroom requirements for unaccompanied personnel requiring housing in the private sector vary from one to three bedrooms based on OSD standards. Grade E5 and below have a one-bedroom requirement, while grades E6 to O3 have a two-bedroom requirement. Grade O4 and above have a three-bedroom requirement.

There are a total of 850 permanent party unaccompanied service members for whom McConnell AFB has the responsibility to house in 2009. In 2014, there are projected to be a total of 797 unaccompanied service members (Table 3-4).

Table 3-4. Unaccompanied Personnel Housing Requirements, 2014

Pay Grade	Number of Bedrooms			Total
	One	Two	Three	
O7+	-	-	-	-
O6	-	-	-	-
O5	-	-	2	2
O4	-	-	7	7
O3	-	48	-	48
O2	-	37	-	37
O1	-	15	-	15
Officers	-	100	9	109
E9	-	1	-	1
E8	-	2	-	2
E7	-	11	-	11
E6	-	28	-	28
E5	108	-	-	108
E4	236	-	-	236
E3	239	-	-	239
E2	31	-	-	31
E1	32	-	-	32
Enlisted	646	42	-	688
Total	646	142	9	797

4.0 MINIMUM MILITARY HOUSING REQUIREMENTS

Air Force policy establishes minimum housing requirements for military families and unaccompanied personnel. The Minimum Housing Requirement for military families is based on the greatest of three specific criteria on the basis of pay grade. For unaccompanied personnel, current Air Force policy requires personnel in grade E3 and below and grade E4 with less than three years of service to reside in government quarters. This chapter reports the minimum military housing requirements at McConnell AFB in the following sections:

- Military Family Minimum Housing Requirement
- Unaccompanied Personnel Minimum Housing Requirement

4.1 MILITARY FAMILY MINIMUM HOUSING REQUIREMENT

In the projected year of the analysis, the installation is assumed to house only its Military Family Minimum Housing Requirement. As a result, all military family rental demand in excess of the Military Family Minimum Housing Requirement requires private sector housing in 2014. The Military Family Minimum Housing Requirement is determined by the greatest of the following three criteria on the basis of pay grade:

- **Military Community** – Housing for ten percent of the military families by pay grade is established in recognition the value of the cohesive attributes of a military community to the morale of its members.

In 2014, there is a military community housing requirement of 142 housing units based on 1,422 military families (Table 4-1).

- **Key and Essential** – Housing for all key and essential military and civilian personnel.

Currently, there are 10 key and essential positions at McConnell AFB. These positions are expected to remain unchanged in the projected year of the analysis (Table 4-2).

- **Historic Housing** – On-base housing units listed on or eligible for the National Register of Historic Places under the National Historic Preservation Act.

At McConnell AFB, there are currently no housing units designated as historic housing (Table 4-3).

The Military Family Minimum Housing Requirement is the greatest of the Military Community, Key and Essential, and Historic Housing Requirements on the basis of pay grade. The Military Family Minimum Housing Requirement or Military Family Floor Housing Requirement for McConnell AFB is 147 housing units in 2014 (Table 4-4). The bedroom requirements for each pay grade are set by the bedroom requirements of the criterion on which the minimum is based for that pay grade.

Table 4-1. Military Community Housing Requirement, 2014

Pay Grade	Number of Bedrooms			Total
	Two	Three	Four+	
O7+	-	-	-	-
O6	-	-	1	1
O5	-	3	1	4
O4	-	4	1	5
O3	5	2	1	8
O2	2	1	-	3
O1	1	-	-	1
Officers	8	10	4	22
E9	-	1	-	1
E8	-	2	1	3
E7	-	13	3	16
E6	14	11	7	32
E5	21	10	5	36
E4	17	3	1	21
E3	8	1	-	9
E2	1	-	-	1
E1	1	-	-	1
Enlisted	62	41	17	120
Total	70	51	21	142

Table 4-2. Key and Essential Housing Requirement, 2014

Pay Grade	Number of Bedrooms			Total
	Two	Three	Four+	
O7+	-	-	-	-
O6	-	-	6	6
O5	-	2	1	3
O4	-	-	-	-
O3	-	-	-	-
O2	-	-	-	-
O1	-	-	-	-
Officers	-	2	7	9
E9	-	1	-	1
E8	-	-	-	-
E7	-	-	-	-
E6	-	-	-	-
E5	-	-	-	-
E4	-	-	-	-
E3	-	-	-	-
E2	-	-	-	-
E1	-	-	-	-
Enlisted	-	1	-	1
Total	-	3	7	10

Table 4-3. Historic Housing Requirement, 2014

Pay Grade	Number of Bedrooms			Total
	Two	Three	Four+	
O7+	-	-	-	-
O6	-	-	-	-
O5	-	-	-	-
O4	-	-	-	-
O3	-	-	-	-
O2	-	-	-	-
O1	-	-	-	-
Officers	-	-	-	-
E9	-	-	-	-
E8	-	-	-	-
E7	-	-	-	-
E6	-	-	-	-
E5	-	-	-	-
E4	-	-	-	-
E3	-	-	-	-
E2	-	-	-	-
E1	-	-	-	-
Enlisted	-	-	-	-
Total	-	-	-	-

Table 4-4. Military Family Minimum Housing Requirement, 2014

Pay Grade	Number of Bedrooms			Total
	Two	Three	Four+	
O7+	-	-	-	-
O6	-	-	6	6
O5	-	3	1	4
O4	-	4	1	5
O3	5	2	1	8
O2	2	1	-	3
O1	1	-	-	1
Officers	8	10	9	27
E9	-	1	-	1
E8	-	2	1	3
E7	-	13	3	16
E6	14	11	7	32
E5	21	10	5	36
E4	17	3	1	21
E3	8	1	-	9
E2	1	-	-	1
E1	1	-	-	1
Enlisted	62	41	17	120
Total	70	51	26	147

4.2 UNACCOMPANIED PERSONNEL MINIMUM HOUSING REQUIREMENT

The Unaccompanied Personnel Minimum Housing Requirement is established by Air Force policy which requires that unaccompanied personnel in grade E4 with less than three years of service and grade E3 and below reside in government-furnished quarters. In 2014, the projected year of the analysis, 361 unaccompanied personnel will require government quarters (Table 4-5).

Table 4-5. Unaccompanied Personnel Minimum Housing Requirement, 2014

Pay Grade	Unaccompanied Personnel	Minimum Housing Requirement
E4	236	59
E3	239	239
E2	31	31
E1	32	32
Enlisted	538	361
Total	538	361

5.0 COMPETING DEMAND

In the final year of the planning period, military families in excess of the Military Family Minimum Housing Requirement and unaccompanied personnel in excess of the Unaccompanied Personnel Minimum Housing Requirement will require housing in the private sector. The military family and unaccompanied personnel shares of the suitable rental housing supply are determined by the housing competition in each market segment. With military homeowners assumed to be suitably housed, military family and unaccompanied personnel who require rental housing compete with the civilian household demand for shares of the effective rental housing supply in each market segment. The competing demand for private sector rental housing is described in the following sections:

- Military Families Requiring Rental Housing
- Unaccompanied Personnel Requiring Rental Housing
- Civilian Rental Demand

5.1 MILITARY FAMILIES REQUIRING RENTAL HOUSING

In 2014, the final year of the planning period, an estimated 1,275 military families will require housing in the private sector (Table 5-1). Their requirements by bedroom (Table 5-2) are based on the current distribution.

Table 5-1. Military Families Requiring Housing, 2014

	2014
Military Families	1,422
Minimum Housing Requirement	147
In Private Sector	1,275

Table 5-2. Military Families Requiring Private Sector Housing, 2014

Pay Grade	Number of Bedrooms			Total
	Two	Three	Four+	
O7+	-	-	-	-
O6	-	-	2	2
O5	-	25	14	39
O4	-	34	8	42
O3	44	16	12	72
O2	17	4	1	22
O1	10	-	-	10
Officers	71	79	37	187
E9	-	8	2	10
E8	-	23	5	28
E7	-	115	31	146
E6	121	96	67	284
E5	189	93	42	324
E4	149	30	9	188
E3	77	7	1	85
E2	11	-	-	11
E1	12	-	-	12
Enlisted	559	372	157	1,088
Total	630	451	194	1,275

In the private sector, military families will either become homeowners or require rental housing. Ownership rates are used to estimate owner-occupied demand for military families. Ownership can be expected to vary with income, allowances, mortgage interest rates, and the general price level of the real estate market. Military households currently occupying government-controlled or privatized units are assumed to become renters of private sector housing if government-controlled or privatized housing were no longer available.

Homeownership and rental rates applied in this study are based on the Air Force Housing Survey for McConnell AFB conducted in 2009 from May to July (Table 5-3). Military family homeownership rates are based on all accompanied personnel within their respective pay grade and are assumed to remain at their 2009 levels over the study period.

Table 5-3. Homeownership Rates for Military Families

Pay Grade	Percentage Homeowners	Percentage Renters
O7+	50.0%	50.0%
O6	50.0%	50.0%
O5	73.7%	26.3%
O4	61.1%	38.9%
O3	64.7%	35.3%
O2	25.0%	75.0%
O1	66.7%	33.3%
E9	100.0%	-
E8	57.1%	42.9%
E7	66.2%	33.8%
E6	75.2%	24.8%
E5	44.0%	56.0%
E4	18.9%	81.1%
E3	-	100.0%
E2	-	100.0%
E1	-	100.0%

For the projected year of the analysis, 697 families are estimated to require homeowner housing and the remaining 578 families are expected to require rental housing (Tables 5-4 and 5-5). Approximately 62.5 percent of the rental requirements will be in the two-bedroom category, while three- and four-bedroom rental requirements will respectively account for 27.0 and 10.5 percent of the total rental demand.

Table 5-4. Military Family Homeowner Requirement, 2014

Pay Grade	Total
O7+	-
O6	2
O5	32
O4	28
O3	52
O2	6
O1	7
Officers	127
E9	10
E8	17
E7	108
E6	238
E5	158
E4	39
E3	-
E2	-
E1	-
Enlisted	570
Total	697

Table 5-5. Military Family Rental Requirement, 2014

Pay Grade	Number of Bedrooms			Total
	Two	Three	Four+	
O7+	-	-	-	-
O6	-	-	-	-
O5	-	4	3	7
O4	-	11	3	14
O3	12	4	4	20
O2	12	3	1	16
O1	3	-	-	3
Officers	27	22	11	60
E9	-	-	-	-
E8	-	9	2	11
E7	-	30	8	38
E6	19	16	11	46
E5	97	48	21	166
E4	118	24	7	149
E3	77	7	1	85
E2	11	-	-	11
E1	12	-	-	12
Enlisted	334	134	50	518
Total	361	156	61	578

There are many external factors that affect housing choices. However, the objective of an HRMA is to assess if there is sufficient affordable private sector housing of acceptable quality. For the purposes of this analysis, in order to determine the military households' market share of suitable housing, military families requiring rental housing are allocated to rental market segments within a spending band for their pay grade and bedroom entitlement. While the MAHC defines the highest affordable cost, a minimum suitable rental cost by bedroom is established to represent the minimum cost for suitable rental units setting the lower limits of spending bands for each pay grade (Table 5-6).

Table 5-6. MAHC With Dependents and Minimum Housing Cost, 2009

Pay Grade	MAHC/BAH	Minimum Housing Cost by Number of Bedrooms ¹		
		Two	Three	Four+
O7+	\$1,723	-	-	\$1,166
O6	\$1,704	-	-	\$1,166
O5	\$1,690	-	\$862	\$1,166
O4	\$1,518	-	\$862	\$1,166
O3	\$1,275	\$724	\$862	\$1,166
O2	\$1,172	\$724	\$862	\$1,166
O1	\$1,022	\$724	\$862	\$1,166
E9	\$1,343	\$724	\$862	\$1,166
E8	\$1,252	\$724	\$862	\$1,166
E7	\$1,212	\$724	\$862	\$1,166
E6	\$1,176	\$724	\$862	\$1,166
E5	\$1,002	\$724	\$862	\$1,166
E4	\$864	\$724	\$862	\$1,166
E3	\$864	\$724	\$862	\$1,166
E2	\$864	\$724	\$862	\$1,166
E1	\$864	\$724	\$862	\$1,166

Service members are allocated to market segments between the minimum cost and their MAHC (Table 5-7). Military households with a MAHC insufficient to meet the minimum cost are assumed to become a private sector shortfall. The analysis assumes that rental costs are constant over the study period.

¹ Includes rent, utility costs, and renter's insurance

Table 5-7. Military Family Rental Requirement by Price Category, 2014

Rental Cost ¹	Number of Bedrooms			Total
	Two	Three	Four+	
\$1,700 & Above	-	-	-	-
\$1,600 - \$1,699	-	-	-	-
\$1,500 - \$1,599	-	-	-	-
\$1,400 - \$1,499	-	-	2	2
\$1,300 - \$1,399	-	1	-	1
\$1,200 - \$1,299	-	1	6	7
\$1,100 - \$1,199	2	12	24	38
\$1,000 - \$1,099	4	21	21	46
\$900 - \$999	22	68	-	90
\$800 - \$899	123	53	8	184
\$700 - \$799	210	-	-	210
\$600 - \$699	-	-	-	-
Below \$600	-	-	-	-
Total	361	156	61	578

5.2 UNACCOMPANIED PERSONNEL REQUIRING RENTAL HOUSING

Unaccompanied personnel requiring private sector housing are all personnel not required to live in military quarters per Air Force policy (Table 5-8).

Table 5-8. Unaccompanied Personnel Requiring Housing, 2014

	2014
Unaccompanied Personnel	797
In Government Quarters	361
In Private Sector	436

For the projected year of the analysis, there are 436 unaccompanied personnel who are not required to reside in military quarters and compete against civilian and military families seeking private sector housing (Table 5-9).

¹ Includes rent, utility costs, and renter's insurance

Table 5-9. Unaccompanied Personnel Private Sector Housing Requirement, 2014

Pay Grade	Number of Bedrooms			Total
	One	Two	Three	
O7+	-	-	-	-
O6	-	-	-	-
O5	-	-	2	2
O4	-	-	7	7
O3	-	48	-	48
O2	-	37	-	37
O1	-	15	-	15
Officers	-	100	9	109
E9	-	1	-	1
E8	-	2	-	2
E7	-	11	-	11
E6	-	28	-	28
E5	108	-	-	108
E4	177	-	-	177
E3	-	-	-	-
E2	-	-	-	-
E1	-	-	-	-
Enlisted	285	42	-	327
Total	285	142	9	436

Unaccompanied personnel who elect to purchase homes are considered suitably housed and do not compete in the rental housing market. The proportion of unaccompanied personnel who seek rental housing in the private sector is estimated from homeownership rates derived from the Air Force Housing Survey conducted for McConnell AFB between May to July 2009 (Table 5-10).

Table 5-10. Homeownership Rates for Unaccompanied Personnel

Pay Grade	Percentage Homeowners	Percentage Renters
O7+	66.7%	33.3%
O6	66.7%	33.3%
O5	66.7%	33.3%
O4	66.7%	33.3%
O3	40.0%	60.0%
O2	-	100.0%
O1	-	100.0%
E9	-	100.0%
E8	-	100.0%
E7	-	100.0%
E6	37.5%	62.5%
E5	22.2%	77.8%
E4	16.7%	83.3%
E3	-	100.0%
E2	-	100.0%
E1	-	100.0%

An estimated 90 unaccompanied service members will require homeowner housing (Table 5-11), and 346 unaccompanied service members will require rental housing (Table 5-12).

Table 5-11. Unaccompanied Personnel Homeowner Requirement, 2014

Pay Grade	Total
O7+	-
O6	-
O5	1
O4	5
O3	19
O2	-
O1	-
Officers	25
E9	-
E8	-
E7	-
E6	11
E5	24
E4	30
E3	-
E2	-
E1	-
Enlisted	65
Total	90

Table 5-12. Unaccompanied Personnel Rental Requirement, 2014

Pay Grade	Number of Bedrooms			Total
	One	Two	Three	
O7+	-	-	-	-
O6	-	-	-	-
O5	-	-	1	1
O4	-	-	2	2
O3	-	29	-	29
O2	-	37	-	37
O1	-	15	-	15
Officers	-	81	3	84
E9	-	1	-	1
E8	-	2	-	2
E7	-	11	-	11
E6	-	17	-	17
E5	84	-	-	84
E4	147	-	-	147
E3	-	-	-	-
E2	-	-	-	-
E1	-	-	-	-
Enlisted	231	31	-	262
Total	231	112	3	346

MAHC sets the upper limit of affordable housing for unaccompanied personnel (Table 5-13). Unaccompanied personnel are allocated to the rental housing market segments based on their assumed expenditures estimates by the personnel within each pay grade (Table 5-14). The analysis assumes that rental costs are constant over the study period.

Table 5-13. MAHC Without Dependents and Minimum Housing Cost, 2009

Pay Grade	MAHC/BAH	Minimum Housing Cost by Number of Bedrooms ¹		
		One	Two	Three
O7+	\$1,302	-	-	\$862
O6	\$1,278	-	-	\$862
O5	\$1,268	-	\$724	\$862
O4	\$1,216	-	\$724	\$862
O3	\$1,113	\$559	\$724	\$862
O2	\$954	\$559	\$724	\$862
O1	\$767	\$559	\$724	\$862
E9	\$1,090	\$559	\$724	\$862
E8	\$1,036	\$559	\$724	\$862
E7	\$909	\$559	\$724	\$862
E6	\$882	\$559	\$724	\$862
E5	\$752	\$559	\$724	\$862
E4	\$648	\$559	\$724	\$862
E3	\$648	\$559	\$724	\$862
E2	\$648	\$559	\$724	\$862
E1	\$648	\$559	\$724	\$862

Table 5-14. Unaccompanied Personnel Rental Requirement by Price Category, 2014

Rental Cost ¹	Number of Bedrooms			Total
	One	Two	Three	
\$1,700 & Above	-	-	-	-
\$1,600 - \$1,699	-	-	-	-
\$1,500 - \$1,599	-	-	-	-
\$1,400 - \$1,499	-	-	-	-
\$1,300 - \$1,399	-	-	-	-
\$1,200 - \$1,299	-	-	-	-
\$1,100 - \$1,199	-	-	-	-
\$1,000 - \$1,099	-	3	1	4
\$900 - \$999	-	7	2	9
\$800 - \$899	-	38	-	38
\$700 - \$799	10	64	-	74
\$600 - \$699	115	-	-	115
Below \$600	106	-	-	106
Total	286	112	3	401

¹ Includes rent, utility costs, and renter's insurance

5.3 CIVILIAN RENTAL DEMAND

Civilian housing demand is comprised of the housing demand by civilian households residing within the housing market area and any military personnel residing in the area who are not a housing responsibility of the installation. Housing demand by these households is determined by their housing decisions based on factors such as income, location, and personal preferences. The civilian rental housing demand projected for 2014 is 105,351 (Table 5-15).

Table 5-15. Civilian Rental Demand, 2014

Rental Cost ¹	Number of Bedrooms					Total
	None	One	Two	Three	Four+	
\$1,700 & Above	50	195	214	420	152	1,031
\$1,600 - \$1,699	8	28	33	65	15	149
\$1,500 - \$1,599	8	28	33	65	15	149
\$1,400 - \$1,499	18	69	106	166	39	398
\$1,300 - \$1,399	29	114	182	266	61	652
\$1,200 - \$1,299	29	114	182	266	61	652
\$1,100 - \$1,199	30	142	498	551	126	1,347
\$1,000 - \$1,099	40	226	897	943	220	2,326
\$900 - \$999	60	389	1,403	1,259	299	3,410
\$800 - \$899	123	1,041	3,205	1,416	338	6,123
\$700 - \$799	207	1,776	5,259	2,093	503	9,838
\$600 - \$699	407	2,900	6,341	2,363	560	12,571
Below \$600	3,978	18,958	10,769	2,534	566	36,805
Total	8,393	41,819	37,416	14,335	3,388	105,351

¹ Includes rent, utility costs, and renter's insurance

6.0 EFFECTIVE RENTAL HOUSING SUPPLY

In this analysis, the Total Military Housing Requirement is based on the manpower and housing supply in 2014, the final year of the five-year planning period. This chapter describes the housing supply available to military households in 2014. While homeowner occupied housing is presented, military homeowners are assumed to be suitably housed for the purposes of the analysis.

The focus of the analysis is the effective rental supply including only those rental units which are affordable and suitable for the military costing no more than their housing allowance and meeting their bedroom requirements. The effective rental housing supply is derived from estimates of the total rental supply and suitable housing in the following sections:

- Private Sector Housing
- Homeowner Housing Supply
- Effective Rental Housing Supply

6.1 PRIVATE SECTOR HOUSING

Private sector housing includes both homeowner housing as well as rental housing within the Housing Market Area. The private sector housing inventory is estimated to increase by 1.2 percent annually through 2014 to a total of 292,684 units, including 174,096 homeowner units and 118,588 rental units (Table 6-1). The effective rental market includes only those rental units which military households are eligible to rent and are affordable and suitable with a rental cost not exceeding their housing allowances while meeting their bedroom requirements.

Table 6-1. Private Sector Housing in the Housing Market Area, 2014

Housing Ownership	2014
Homeowner Housing	174,096
Rental Housing	118,588
Effective Supply	18,658
Percent of Total Rental Supply	16%
Total	292,684

6.2 HOMEOWNER HOUSING SUPPLY

Homeowner housing is estimated to grow at 1.5 percent annually, reaching 174,096 units by 2014. All owner-occupied housing, with the exception of mobile homes, is considered suitable for military personnel.

6.3 EFFECTIVE RENTAL HOUSING SUPPLY

The effective rental supply is comprised of the rental housing units that are affordable and suitable to the military households. The effective supply does not include housing that is more costly than the highest BAH rates for the installation nor below the cost of a minimally acceptable housing unit. The effective rental supply also does not include any efficiency units as they would not satisfy the bedroom entitlement of military families or unaccompanied personnel.

The determination of the effective rental supply starts with the total rental supply. Restricted rental units, for which the military households are not eligible, are first removed from the total supply. The effective rentals are further reduced by the removal of unsuitable units. Suitability is addressed from the perspective of

- Housing Type,
- Unsuitable Housing Areas,
- Housing Condition.

Finally, suitability is further limited in terms of cost by the housing allowance and the bedroom entitlement of the military members requiring private sector housing.

6.3.1 TOTAL RENTAL HOUSING SUPPLY

The total rental supply in the Housing Market Area by 2014 is estimated at 118,588 units. Two-bedroom and smaller units make up 83.4 percent of rental housing supply (Table 6-2). Three-bedroom units make up 13.4 percent of rental housing and the remaining 3.2 percent have four or more bedrooms.

Table 6-2. Rental Housing Supply, 2014

Rental Cost ¹	Number of Bedrooms					Total
	None	One	Two	Three	Four+	
\$1,700 & Above	53	206	226	439	161	1,085
\$1,600 - \$1,699	6	24	27	57	14	128
\$1,500 - \$1,599	6	24	27	57	14	128
\$1,400 - \$1,499	19	71	94	161	39	384
\$1,300 - \$1,399	33	123	165	266	64	651
\$1,200 - \$1,299	33	123	165	266	64	651
\$1,100 - \$1,199	30	140	479	547	132	1,328
\$1,000 - \$1,099	39	225	901	959	231	2,355
\$900 - \$999	58	350	1,317	1,401	337	3,463
\$800 - \$899	119	983	3,103	1,452	345	6,002
\$700 - \$799	210	1,804	5,485	2,109	504	10,112
\$600 - \$699	285	2,447	7,380	2,852	686	13,650
Below \$600	4,529	21,986	12,790	3,032	680	43,017
Total	9,374	47,294	42,192	15,930	3,798	118,588

¹ Includes rent, utility costs, and renter's insurance

6.3.2 RESTRICTED RENTAL HOUSING

Income and age restrictions are the most common limiting factors for units that have eligibility restrictions. In general, military households do not meet these requirements or when they do, the waiting lists are excessively long in relation to the member's tour of duty at a location so that such housing is not an option for the eligible military household. As such these rental units are assumed not to be available to military households.

6.3.3 SUITABLE RENTAL HOUSING

The effective rental supply only includes housing that is determined to be affordable and suitable for military personnel. In general, suitability is a function of location (i.e., within the Housing Market Area), health and safety concerns, and level of quality. From the individual military household perspective, the housing must be affordable in that it does not exceed the member's housing allowance and must meet the household's bedroom requirement.

Determinations of rental housing suitability within the McConnell AFB Housing Market Area is based on discussions with the installation housing office personnel, interviews with local property managers and realtors, surveys of the local community, and other published data. Housing must meet the general suitability factors, have enough bedrooms to meet the minimum bedroom entitlement, and not exceed the maximum BAH rates for each bedroom category.

Location and cost are two important criteria used in determining suitability. The HRMA process does not permit extensive surveying or inspection of the individual housing units. Housing may have similar conditions based on their location. Common age and type of construction, transportation, level of crime, health and safety factors, coupled with close proximity, may permit classifying housing suitability by a geographic area. Rental cost may serve as a proxy for housing condition. Other things being equal, lower cost housing will generally have fewer amenities and reduced qualities than more expensive housing. A rental cost that represents the lowest cost for a minimally acceptable housing unit is used to set the lower limit of rental housing suitability.

6.3.3.1 Air Force General Suitability Factors

Air Force standards for judging suitability of private sector housing are based on DoD 4165.63-M (U.S. Department of Defense, 1993) as interpreted by the Air Force (Figure 6-1). Housing must be within the Housing Market Area for the installation and not in an area designated by the base commander as unacceptable for health or safety reasons. Housing must be no more expensive than the Basic Allowance for Housing for each pay grade as determined by DoD based upon the local median housing cost.

Figure 6-1. Air Force General Suitability Factors

- Housing must be well maintained and structurally sound.
- Housing must not pose a health or safety hazard.
- Housing must be a complete unit with private entrance, bathroom, and kitchen for the sole use of its occupants.
- Rooms must be arranged so that the kitchen, a bathroom, the living room, and bedrooms can be entered without passing through bedrooms.
- Units must have air conditioning or a similar cooling system and a permanently-installed, adequately-vented heating system if the installation is located in a climate where these are to be included in U.S. Government construction by DoD standards.
- Housing must have adequate electrical service with washer/dryer connections or accessible laundry facilities on the premises.
- Unit must have hot and cold running potable water and sufficient sanitary and sewage disposal facilities.
- Mobile homes, even if owner-occupied, are not considered suitable housing for military personnel.

Source: DoD 4165.63-M U.S. Department of Defense, 1993

6.3.3.2 Unsuitable Housing Types

By policy, mobile home units are considered unsuitable housing for military personnel. 2000 U.S. Census data provides estimates of rental mobile home totals and price bedroom composition.

6.3.3.3 Unsuitable Housing Areas

For the purposes of this analysis, rental housing within the Housing Market Area is considered unsuitable for military households if it falls within a geographical area that is characteristic of conditions that would present health and safety concerns. Some of these conditions include a high rate of violent crime against persons or property, an industrial area and/or high commercial density, and extreme decay in neighborhood condition. According to the *American Housing Survey*, neighborhood conditions that could signify problems include long-term problems with trash accumulation, major street repairs, bared windows, broken windows, vandalized property, and boarded/abandoned properties.

Unsuitable areas were estimated for this analysis by considering data provided by McConnell AFB housing office and published crime data. Applied unsuitable areas are defined for analytical purposes only.

6.3.3.4 Unsuitable Housing Condition

Housing units that are unsuitable for military households are not limited to unsuitable areas or of an unsuitable housing type. As a house by house survey for suitability is beyond the scope of this HRMA, housing cost is applied as a proxy for suitability. In a competitive market, rental costs reflect the housing quality other things being equal. The rental costs by number of bedroom categories are estimated to establish the minimum costs per month in order for a military member to secure housing of a minimum acceptable quality (Table 6-3). As such, any private sector rental units below the defined minimum limits are considered unsuitable for military members.

Table 6-3. Minimum Acceptable Costs by Bedroom, 2014

Number of Bedrooms	Minimum Rent ¹	Total Average Utility Costs ²	Rental Insurance	Minimum Costs
One	\$400	\$142	\$18	\$559
Two	\$550	\$154	\$20	\$724
Three	\$675	\$167	\$21	\$862
Four+	\$965	\$179	\$22	\$1,166

6.3.4 EFFECTIVE RENTAL SUPPLY

The effective rental housing supply in the Housing Market Area is estimated at 18,658 units in 2014 (Table 6-4). These are the affordable, suitable rental housing units for the military households, both families and unaccompanied personnel. Only rental housing costing less than the highest BAH rate for each bedroom category is included.

Table 6-4. Effective Rental Housing Supply, 2014

Rental Cost ³	Number of Bedrooms				Total
	One	Two	Three	Four+	
\$1,700 & Above	-	-	-	-	-
\$1,600 - \$1,699	-	-	49	14	63
\$1,500 - \$1,599	-	-	54	14	68
\$1,400 - \$1,499	-	-	154	37	191
\$1,300 - \$1,399	-	-	255	61	316
\$1,200 - \$1,299	-	119	256	61	436
\$1,100 - \$1,199	-	458	523	43	1,024
\$1,000 - \$1,099	-	836	884	-	1,720
\$900 - \$999	-	1,194	1,263	-	2,457
\$800 - \$899	-	2,777	466	-	3,243
\$700 - \$799	848	3,594	-	-	4,442
\$600 - \$699	2,134	-	-	-	2,134
Below \$600	1,206	-	-	-	1,206
Total	5,546	8,978	3,904	230	18,658

¹ Minimum rent estimates are based on McConnell AFB provided AHRN listings from May 6, 2009 and other published sources.

² Average cost estimates are based on 2009 HUD Allowances for Tenant Furnished Utilities for Wichita, Kansas.

³ Includes rent, utility costs, and renter's insurance

7.0 TOTAL MILITARY FAMILY HOUSING REQUIREMENT

This chapter summarizes the determination of the Total Military Family Housing Requirement for McConnell AFB. The Private Sector Shortfall of 164 units coupled with the 147 unit Military Family Minimum Housing Requirement results in a Total Military Family Housing Requirement of 311 units.

7.1 PRIVATE SECTOR SHORTFALL

Military households in excess of the Minimum Housing Requirement for their accompaniment status are assumed to require private sector rental housing. Military households that own their housing are assumed to be suitably housed.

For military households requiring rental housing, the sufficiency of the market to meet their requirements is determined through an allocation process which determines the military's share of the suitable rental housing for each accompaniment status. The allocation of the available, suitable supply for the military is based on a competitive market share concept. In each market segment, the military households compete against the civilian and other households who may also require rental housing in the market area. Each competing group is allocated their proportionate share of the suitable rental units.

The Private Sector Shortfall is determined as the difference between the military households requiring rental housing and the share of rental housing allocated to military households.

7.1.1 SUITABLE MARKET SUPPLY ALLOCATED TO THE MILITARY

The allocation of suitable rental housing to the military families requiring rental housing is shown in Table 7-1. The analysis indicates that 414 military families would be successful in obtaining suitable rental units. There is still an additional requirement, or shortfall, of 164 suitable community rentals for McConnell AFB in excess of its Military Family Minimum Housing Requirement in 2014.

Table 7-1. Market Allocation of Suitable Rental Housing

Military Families	578
Allocated Suitable Housing	414
Private Sector Shortfall	164

7.1.2 PRIVATE SECTOR HOUSING SHORTFALL

As determined by the allocation analysis, the Private Sector Shortfall of 164 units for military families is presented in Table 7-2.

Table 7-2. Private Sector Shortfall for Military Families

Rental Cost ¹	Number of Bedrooms			Total
	Two	Three	Four+	
\$1,700 & Above	-	-	-	-
\$1,600 - \$1,699	-	-	-	-
\$1,500 - \$1,599	-	-	-	-
\$1,400 - \$1,499	-	-	-	-
\$1,300 - \$1,399	-	-	-	-
\$1,200 - \$1,299	-	-	1	1
\$1,100 - \$1,199	-	2	13	15
\$1,000 - \$1,099	1	3	21	25
\$900 - \$999	5	9	-	14
\$800 - \$899	30	20	8	58
\$700 - \$799	51	-	-	51
\$600 - \$699	-	-	-	-
Below \$600	-	-	-	-
Total	87	34	43	164

7.2 TOTAL MILITARY FAMILY HOUSING REQUIREMENT

The Military Family Minimum Housing Requirement is comprised of the Community Housing Requirement, the Key and Essential Housing Requirement, and the Historic Housing Requirement (Table 7-3). About 89.6 percent of the 164 unit Private Sector Shortfall is in two and three bedroom units with the remaining 10.4 percent in four bedrooms units (Table 7-4). The Total Military Family Housing Requirement by bedroom category is the sum of the Military Family Minimum Housing Requirement and the Private Sector Shortfall (Table 7-5).

¹ Includes rent, utility costs, and renter's insurance

Table 7-3. Total Military Family Housing Requirement Summary

Pay Grade	Military Families	Military Community	Key & Essential	Historic Housing	Minimum Housing Requirement	Private Sector Shortfall	Total Military Housing Requirement
O7+	-	-	-	-	-	-	-
O6	8	1	6	-	6	-	6
O5	43	4	3	-	4	-	4
O4	47	5	-	-	5	2	7
O3	80	8	-	-	8	5	13
O2	25	3	-	-	3	3	6
O1	11	1	-	-	1	-	1
Officers	214	22	9	-	27	10	37
E9	11	1	1	-	1	-	1
E8	31	3	-	-	3	2	5
E7	162	16	-	-	16	10	26
E6	316	32	-	-	32	14	46
E5	360	36	-	-	36	54	90
E4	209	21	-	-	21	45	66
E3	94	9	-	-	9	23	32
E2	12	1	-	-	1	3	4
E1	13	1	-	-	1	3	4
Enlisted	1,208	120	1	-	120	154	274
Total	1,422	142	10	-	147	164	311

Table 7-4. Military Family Private Sector Shortfall

Pay Grade	Number of Bedrooms			Total
	Two	Three	Four+	
O7+	-	-	-	-
O6	-	-	-	-
O5	-	-	-	-
O4	-	2	-	2
O3	3	-	2	5
O2	2	-	1	3
O1	-	-	-	-
Officers	5	2	3	10
E9	-	-	-	-
E8	-	1	1	2
E7	-	6	4	10
E6	5	3	6	14
E5	23	10	21	54
E4	29	9	7	45
E3	19	3	1	23
E2	3	-	-	3
E1	3	-	-	3
Enlisted	82	32	40	154
Total	87	34	43	164

Table 7-5. Total Military Family Housing Requirement

Pay Grade	Number of Bedrooms			Total
	Two	Three	Four+	
O7+	-	-	-	-
O6	-	-	6	6
O5	-	3	1	4
O4	-	6	1	7
O3	8	2	3	13
O2	4	1	1	6
O1	1	-	-	1
Officers	13	12	12	37
E9	-	1	-	1
E8	-	3	2	5
E7	-	19	7	26
E6	19	14	13	46
E5	44	20	26	90
E4	46	12	8	66
E3	27	4	1	32
E2	4	-	-	4
E1	4	-	-	4
Enlisted	144	73	57	274
Total	157	85	69	311

8.0 SUMMARY

This chapter summarizes the HRMA Total Military Family Housing Requirement results for McConnell AFB.

Table 8-1. Military Family Housing Requirement Summary

Total Military Housing Requirements	Military Families
Military Households	1,422
Minimum Housing Requirement	147
Private Sector Shortfall	164
Total Military Housing Requirements	311

HOUSING MARKET AREA

McConnell AFB is located in Sedgwick County, Kansas and is just east of the city of Wichita.

HOUSING SUPPLY

There is a total private housing stock of 275,989 units, including 161,950 homeowner units and 114,039 rental units. At an estimated annual growth rate of 1.2 percent, the housing market would increase to 292,684 units in 2014.

McConnell AFB currently has 493 total military family housing units and is expected to decline to 357 government-owned units by 2014.

MILITARY HOUSING DEMAND

The McConnell AFB housing office is currently responsible for supporting 2,693 military personnel including tenant personnel. This number is expected to increase to 2,538 authorizations by 2014.

There are projected to be 1,422 military families and 797 unaccompanied personnel, of which 1,275 military families and 436 unaccompanied personnel will require private sector housing.

MILITARY FAMILY MINIMUM HOUSING REQUIREMENT

The Military Family Minimum Housing Requirement, based on the greater of each of its components by pay grade, totals 147 military housing units. The individual components are:

Military Community Housing Requirement

The on-base community criterion requires military housing for 10 percent of all military families by pay grade. This requirement is projected to total 142 housing units.

Key and Essential Housing Requirement

There are projected to be 10 key and essential positions at McConnell AFB.

Historic Housing Requirement

There are no historic housing units at McConnell AFB.

PRIVATE SECTOR SHORTFALL FOR MILITARY FAMILIES

There is a projected shortfall of 164 suitable private sector rental units for military families.

TOTAL MILITARY FAMILY HOUSING REQUIREMENT

The Total Military Family Housing Requirement based on the sum of the Military Family Minimum Housing Requirement and the Private Sector Shortfall by pay grade totals 311 military housing units.

9.0 REFERENCES

- Banks, Steve. Senior Planner. Wichita-Sedgwick County Metropolitan Area Planning Department. 455 N. Main, Wichita, KS. (316) 352-4853
- Barber, Dave. Senior Planner. Wichita-Sedgwick County Metropolitan Area Planning Department. 455 N Main, Wichita, KS. (316) 268-4421
- Burks, Byron. Branson Property Management. 435 N. Broadway St., Wichita, KS. (316) 267-1271
- Federal Housing Finance Agency. “Housing Price Index”. <http://www.fhfa.gov> 8 May 2009.
- HM Hampco Management. 8165 East Central, Wichita, KS. (316) 681-2851
- Hansen, Craig. Weigand/Omega. 333 N Broadway St., Wichita, KS. (316) 263-2215
- Janssen, Satin. Planning Analyst. Wichita Police Department. 455 N Main, Wichita, KS.
- Jolly, Kasey. Regional Economic Analyst. WSU Center for Economic Development and Business Research. 1845 Fairmount, Wichita, KS. (316) 978-3456
- Longhofer, Stanley. Director. WSU Center for Real Estate. 1845 N Fairmount, Wichita, KS. (316) 978-7120. realestate.wichita.edu
- Lotson, Joe. Wichita Housing and Community Services. 332 N. Riverview, Wichita, KS. (316) 462-3700
- Mayer, Todd. GIS Analyst. Wichita Police Department. 455 N Main, Wichita, KS.
- McPhail, Ruth. Nies Properties. 10333 E 21st St N, Ste 303, Wichita, KS. (316) 684-0163
- Northstar Property Management. 101 N Clifton Ave, Wichita, KS. (316) 689-8577
- REIS, Inc. “Wichita Apartment First Quarter 2005 MetroTrend Futures”. 4 May 2009.
- _____. “Apartment First Glance 2009 Quarter 1”. 4 May 2009.
- _____. “Apartment First Glance 2008 Quarter 4”. 4 May 2009.
- _____. “Apartment First Glance 2007 Quarter 4”. 4 May 2009.
- _____. “Apartment First Glance 2006 Quarter 4”. 4 May 2009.
- _____. “Apartment First Glance 2005 Quarter 4”. 4 May 2009.
- Rental Properties. 429 E Madison, Derby, KS. (316) 788-0007

- Savage, Paul. Apartment Directory. 4700 E Central, Wichita, KS.
- Underwood, Katherine. HRMA Program Manager. AF/A7CAH. Crystal Gateway One, Suite 1000, 1235 Clark Street, Arlington, VA 22202. (703) 604-4645
- _____. 2009 Integrated Housing Requirements Document (IMRD). 9 July 2009.
- U.S. Census Bureau. 2000 Summary Population and Housing Characteristics, United States. November 2001.
- _____. 2000 Census of Population and Housing: Summary File 3, KS. September 2002.
- _____. 2000 Census of Population and Housing: Public Use Micro data Samples. December 2003.
- _____. Profile of General Demographic Characteristics: 2000. Census 2000.
- _____. American Community Survey, 2001-2007.
- U.S. Department of Housing and Urban Development. "Single Family and Multi-Family Building Permits: 2000-2008". <http://socds.huduser.org>. 8 May 2009.
- _____. "Single Family and Multi-Family Building Permits: 2009". <http://socds.huduser.org>. 8 May 2009.
- Vaughn, Mary K.. Director. Housing and Community Services Department. 322 N. Riverview, Wichita, KS. (316) 462-3795 MKVaughn@wichita.gov
- Wichita Housing Authority. "Section 8 Housing Choice Voucher Program: Utility Allowance Schedule for the Wichita Metropolitan Area – 2009". <http://www.wichita.gov/CityOffices/Housing/Section8/Section8Docs.htm>. 5 May 2009.