



**UNITED STATES AIR FORCE UNACCOMPANIED HOUSING DIVESTITURE:
AN ECONOMIC ANALYSIS**

THESIS

Dustin L. Gooden, Captain, USAF

AFIT-ENV-MS-17-M-188

**DEPARTMENT OF THE AIR FORCE
AIR UNIVERSITY**

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Wright-Patterson Air Force Base, Ohio

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THESIS

Presented to the Faculty

Department of Systems Engineering and Management

Graduate School of Engineering and Management

Air Force Institute of Technology

Air University

Air Education and Training Command

In Partial Fulfillment of the Requirements for the
Degree of Master of Science in Engineering Management

Dustin L. Gooden, MBA, BS

Captain, USAF

March 2017

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Abstract

The objective of this research is to determine potential cost savings associated with Air Force unaccompanied housing divestiture. This research uses Air Education and Training Command (AETC) installations as the data sample for the analysis, and will analyze the status quo, privatization, and identical FSRM options. With 16% of Air Force unaccompanied housing currently rated at various levels of inadequacy and the PRV for the inadequate housing at \$2,315,773,149.00, the costs associated with renovating the inadequate unaccompanied housing is substantial. Moreover, the inadequacy of unaccompanied housing is part of the Air Force's acceptance of risk in facilities and infrastructure to recapitalize and modernize aging aircraft and equipment (Wynne & Moseley, 2007). Compounding the current situation, post-sequestration budgets have a high degree of uncertainty with regards to funding (Harrison, 2013). A 50-year net present value cost estimation model, a comparative analysis of potential scenarios, and a risk analysis based on the Air Force risk assessment model was used to estimate costs and categorize potential risks involved with each option. The cost estimation model and risk matrix determined that identical FSRM is the best choice moving forward, with the lowest potential total cost of ownership and risk, to the Air Force.

Acknowledgments

I would like to express my sincere appreciation to my thesis advisor, Dr. Jared Astin, for his guidance and support throughout the course of this thesis effort. The insight, patience and experience was certainly appreciated and instrumental to the completion of my research. I would, also, like to thank my faculty academic advisor, Lt Col Christopher Stoppel and committee member, Dr. Robert Fass for both the support, effort and latitude provided to me in this endeavor.

I would also like to thank Mr. Fred Arzt and Mr. Arthur Uhlig as well as the numerous housing experts across the United States Air Force who provided invaluable accompanied and unaccompanied housing data and information.

Finally, I am eternally grateful for my amazing wife and son for their continued support and understanding. They were continuously patient as I spent evenings and weekends on my research, and my wife's willingness to read and comment on the drafts greatly improved the quality of this document.

Dustin L. Gooden

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UNITED STATES AIR FORCE UNACCOMPANIED HOUSING DIVESTITURE: AN ECONOMIC ANALYSIS

I. Introduction

1.1. Background

In response to the concern that inadequate housing may be contributing to the decision for service members to leave the military, Congress enacted the Military Housing Privatization Initiative (MHPI) in 1996 (GAO-14-313, 2014). After Congress enacted the MHPI, the Army, Navy, Air Force, and Marines all conducted business case and lifecycle analyses from 1997-2011 to determine the savings between normal military construction and privatization to improve housing quality. As part of the analysis, the Air Force concluded that privatizing dorms would have a negative effect on unit cohesion, and that current unaccompanied housing met the MHPI specified requirements—meaning, Privatization is not necessary (GAO-14-313, 2014).

This initial conclusion was determined through a 1997 Air Force dormitory privatization feasibility study, which included five months of data gathering site visits to Tinker Air Force Base in Oklahoma and Dover Air Force Base in Delaware (GAO-14-313, 2014). The Air Force selected these locations from eight candidate bases nominated by the major commands because both bases had housing shortages (GAO-14-313, 2014). Based on the post-site-visit financial analyses, the study's authors found that privatization would be less expensive than traditional military construction at Tinker Air Force Base but not at Dover Air Force Base. At Tinker Air Force Base, the cost of building unaccompanied privatized housing would be 79.58% of the cost of traditional military

construction, which equates to a savings of 20.42%. This is compared with the cost of building unaccompanied privatized housing at Tinker Air Force Base being 119.91% of the cost of traditional military construction, which equates to a 19.91% extra expense (GAO-14-313, 2014). The study's authors concluded that privatization was more suitable for Air Force installations with a slow local economy, high installation and local support for privatization, degraded existing facilities, and a large unaccompanied housing shortage (GAO-14-313, 2014). Finally, the study concluded that the privatized housing for unaccompanied personnel was only suitable for certain locations and should only be used to augment traditional military construction funding (GAO-14-313, 2014).

Following the 1997 Dormitory Privatization Feasibility Study, the Air Force held a subject matter expert (SME) meeting to discuss whether privatization should be used as a tool to construct dormitories. The SME members discussed the conclusions from the study, as well as other factors including: the effects on utilities, leasing, the mandatory assignment of personnel to privatized housing, and leadership control over housing resident activities (GAO-14-313, 2014). Based on the SME discussions, Air Force leadership decided not to pursue privatization to construct dormitories, because it did not appear to be a cost-effective alternative to military construction.

In 2002, another team of Air Force leaders met to further discuss the potential of an Air Force dormitory privatization program. This group further identified issues, such as unit integrity, the scale of necessary government funding commitment, enforcing tenant discipline, and conducting inspections in buildings that were not completely government-owned as factors that would render privatization unfeasible (GAO-14-313, 2014). After the leadership discussions, the Air Force formally concluded, without any further economic

analysis or fiscal consideration, that military construction would meet their needs for unaccompanied housing and decided against pursuing privatization.

Following the 2002 decision that military construction would meet Air Force unaccompanied housing needs, a 2004 Naval Postgraduate Study concluded that on-base housing, both accompanied and unaccompanied, is more costly than private sector housing provided to service members through housing allowances (Punja & Kerek, 2004). This study indicated that the private sector was able to provide a cheaper total cost of ownership for base housing than military construction. Additionally, the study found that the private sector could provide infrastructure with increased quality of life/greater occupant satisfaction than military construction for base housing. Although it is never questioned whether military construction can meet unaccompanied housing needs, the Naval Postgraduate Study illustrated that privatization can possibly provide an enhanced quality of life/occupant satisfaction at a cheaper price.

Although the Air Force Center for Engineering and Environment (AFCEE) handled many Privatization efforts prior, two years after the Naval Postgraduate Study the United States Air Force centralized the Air Force accompanied housing privatization initiative at AFCEE in an effort to provide monetary, developmental and community benefits (AFCEC, 2016). The Air Force determined that centralization would provide Air Force accompanied housing an increase in safety, quality, affordability, and well-maintained housing units. Coupling each of these factors that are described as Air Force accompanied housing privatization benefits with the overall success in the accompanied housing privatization program, a parallel that potential cost savings with respect to privatized unaccompanied housing can be made.

Through the realization that the AFCEC accompanied housing privatization initiative provided accompanied housing members an increase in quality at a lower price, AFCEC has informally stated that privatization, not military construction, is able to better meet their needs for accompanied housing. Furthermore, the aforementioned benefits listed by AFCEC to pursue accompanied housing privatization mirrors the Naval Postgraduate Study conclusion that the private sector is able to provide an increase in housing quality at a cheaper rate. Furthermore, the accompanied housing privatization initiative implies that the original Air Force feasibility study that stated privatization is only cheaper at certain locations may not hold true. Through the wholesale privatization of accompanied housing, the Air Force has shown that privatization is the cheapest option at all locations for accompanied housing. With Air Force accompanied housing privatization proven to be cheaper while providing increased quality, the Air Force should determine whether the same would hold true for unaccompanied housing privatization.

Two years following the centralization of the Air Force accompanied housing privatization initiative at AFCEE, a study by Neuhaus, Bissell, Greenhalgh, Hathaway, and Singh (2010) determined that many junior enlisted unaccompanied housing conditions are inadequate and in need of renovation. Additionally, the research indicated that current unaccompanied housing conditions contain great disparity when compared with accompanied housing conditions (Neuhaus, et al., 2010). In the FY 2016 Air Force Posture, the Air Force recognized that budget uncertainty and need for fiscal restraint is the new norm. With the increases in personnel, medical, and technology costs, the Center for Strategic and Budgetary Assessments (an independent US defense policy, force planning and budgets ‘think tank’) determined that the Air Force must revisit the possibility of

unaccompanied housing divestiture for cost reduction (Harrison, 2013). Consequently, the Air Force should use lessons learned in accompanied military family housing privatization to further explore fiscal savings in unaccompanied housing.

The Air Force must continue to explore ways to save money, while maintaining outstanding support to their members. One possible method the Air Force can use to maintain or increase that support to junior enlisted men and women while saving money is through the divestiture of Air Force unaccompanied housing. A recognizable disparity in condition can be seen between accompanied and unaccompanied Air Force housing. The disparity can be attributed the lack of funding for facility maintenance in Sustainment, Restoration, and Modification (SRM) funds in unaccompanied housing (Neuhaus, et al., 2010). In privatization, SRM becomes part of the privatization cost and not a separate budget that can be cut. The divestiture of unaccompanied housing has the potential to provide Airmen with a better living environment and increased quality of life as have been witnessed with the privatization of accompanied housing.

1.2. Problem Statement

The objective of this research is to determine the potential cost savings associated with Air Force unaccompanied housing privatization. This research will use Air Education and Training Command (AETC) installations as the data sample for the analysis. Figure 1 provides a graphical presentation of the need for unaccompanied housing renovation or new construction, as 16% current total of unaccompanied housing inventory has been rated inadequate or severely inadequate (Neuhaus, et al., 2010).

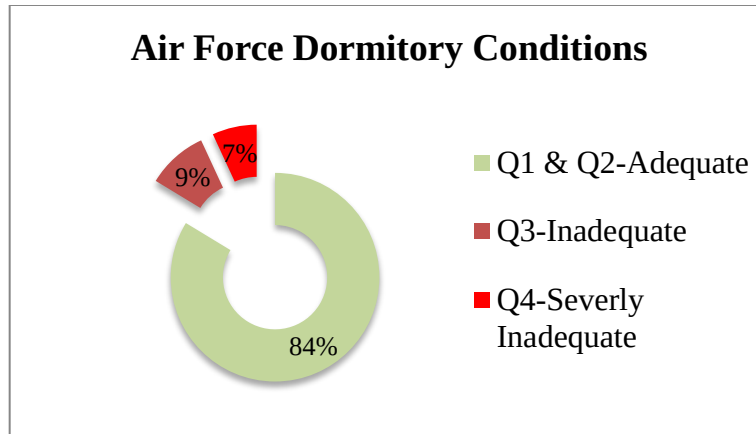


Figure 1: Air Force Dormitory Conditions (Neuhaus, et al., 2010)

The degradation is part of the Air Force’s acceptance of risk in facilities and infrastructure to recapitalize and modernize aging aircraft and equipment (Wynne & Moseley, 2007). Compounding the current situation, post-sequestration budgets have a high degree of uncertainty with regards to funding (Harrison, 2013). Furthermore, the Air Force current environment is increasingly fiscally constrained (James & Welch, 2015). More specifically, the Air Force is presently unable to fund current sustainment and restoration requirements (Johnson, 2015). The accepted infrastructure risk, coupled with post-sequestration budgets and fiscal constraints pose a significant threat to the quality of life for our junior enlisted Airmen. Based on the current fiscally-constrained environment and accepted risk, the United States Air Force must take action to provide unaccompanied Airmen with quality living facilities at the lowest total cost of ownership to the government.

1.3. Justification

Taibl (1997) found that the private sector housing industry appeared to provide suitable housing to military service members at half of what the government spends now. The conclusion Taibl described, coupled with the success experienced through

Accompanied Housing privatization, provides the foundation for this research. The research will determine the lower total cost of ownership between the status quo, privatization, and identical facility sustainment, restoration and modernization (FSRM) over the next 50 years—based on current net present value (NPV). For consistency it will use the accompanied housing privatization methodology used throughout the Air Force for all privatized accompanied housing. Additionally, this research will provide the key factors that predict cost savings based on the following 9 governmental cost and benefit items: Basic Allowance for Housing (BAH), FSRM, Operations and Maintenance (O&M), Utilities, Moves, Manpower, Scoring, Project Management, and Out-Year Renovations. Finally, this research will identify common privatization risk factors and determine the severity of those risk factors. Each of these outcomes will determine the costs and risks associated with each of the alternatives; status quo, privatization, and identical FSRM; that the United States Air Force can expect to incur for all junior enlisted unaccompanied housing units.

1.4. Assumptions

This research is constrained by five assumptions that serve as limiting factors.

The assumptions made to facilitate this research are:

1. The target for unaccompanied housing privatization is first-term enlisted Airmen E1-E4 (Neuhaus, et al., 2010).
2. The average percent saved in Air Education and Training Command unaccompanied housing will be representative of the percent saved in all Air Force unaccompanied housing for the 16% of current inadequate unaccompanied housing inventory.

3. Military construction and private contractors can complete the work described in RS Means at the same rate for the same unit price.
4. The privatized unaccompanied housing standard should be, at minimum, the Dorms-4-Airmen model that can effectively compete with housing units in the housing market area.
5. Cultural benefits that are associated with Airmen living in unaccompanied housing are not accounted for, and this cost analysis focuses solely on the economic benefit.

The first assumption eliminated Non-Commissioned Officer, Senior Non-Commissioned Officer, and Officer unaccompanied housing units, and focused the research on junior enlisted as the sole source of unaccompanied housing. All data collected and information provided is assumed to be for junior enlisted unaccompanied housing. This assumption standardizes the dormitories from base to base, and allows for a uniform unaccompanied housing comparison.

The second assumption utilizes the analysis harbored through Air Education and Training Command privatization, and generalized the results across the Air Force. This generalization represents the most important assumption, and is made based on the Military Times report that ranked 68 stateside bases on their surrounding communities, school quality, local economy, crime rates, traffic, and climate (Losey, 2014). The rankings ranged from 3rd to 66th for the 11 Air Education and Training Command bases, and the average ranking was 34.818. When applying the average ranking, the assumption can be made that Air Education and Training Command equates to an average command and the average percent saved per base can be distributed across other commands in the Air Force.

With the third assumption, the disparity in military or contractor productivity is eliminated and all work to be accomplished is related back to RS Means. Military rates will not be taken into account, and all work will be estimated using RS Means. Furthermore, unaccompanied housing construction will be through contracted labor, whether it is privatization or identical FSRM, and the costs are assumed to be the same under RS Means.

The fourth assumption eliminates market-risk and provides junior enlisted members with the Dorms-4-Airmen minimum. However, the unaccompanied housing units provided to the junior enlisted will be comparable to the local market to ensure quality. In addition, this market-style housing will allow for the standard building rates for that region. This assumption allows each base to provide unaccompanied housing units comparable to the local market through privatization.

Finally, the fifth assumption limits the analysis to a pure fiscal decision, and removes the cultural issues with unaccompanied housing divestiture. All cultural issues associated with privatization will not be taken into account and all analysis will be based on the fiscal findings associated with unaccompanied housing divestiture. These five assumptions provide limitations to this research; however, the assumptions do provide an opportunity for follow-on research for unaccompanied housing privatization.

1.5. Definition of Terms

The research utilizes 9 governmental cost and benefit items:

- BAH, is the basic allowance for housing and is based on geographic location, pay grade and dependency status (<http://www.defensetravel.dod.mil/site/bah.cfm>).

- FSRM is the cost to completely renovate the current dormitory facilities; the cost is equivalent to 70% of new military construction (AETC Group I, 2005).
- O&M, which includes Routine and Periodic operations and maintenance that encapsulate preventative and corrective maintenance on all facilities (AETC Group II, 2007).
- Utilities are defined as the annual expense for natural gas, electricity, water, sewer and steam (if applicable) service (Home Energy Saver, 2016).
- Moves or moving expenditures are defined as the total cost of moving household goods and personal effects, and reasonable travel and lodging expenses (IRS, 2014).
- Manpower is defined as the annual reoccurring cost for Government personnel who directly support the military families (AETC Group I, 2005).
- Scoring is the Federal Credit Reform Act of 1990 that required the Government to recognize the cost of, and set aside resources for, future losses of obligation (AETC Group I, 2005).
- Project management is the manpower or contract cost associated with project development, execution, and long-term portfolio management (AETC Group I, 2005).
- Out-Year Renovations are defined as costs for whole building renovation or replacement beginning at a pre-determined year of the project (AETC Group I, 2005)

This research did not include impact aid or real estate costs into the calculation based on the fact that they are identical across the status quo, privatization, and identical FSRM

alternatives and provide no additional value to the research because this study focuses on cost savings and not overall costs. The aforementioned cost and benefit items were utilized based on the Air Force accompanied housing privatization OSD Housing Privatization Life Cycle Cost policy. Each of these factors are used to compare costs across the 50-year estimate, and are critical to the cost and benefit analysis.

1.6. Scope

The scope of this research is the analysis of Air Force Air Education and Training Command unaccompanied housing alternatives: 1) status quo, 2) privatization, and 3) identical FSRM. The analysis will provide a 50-year cost comparison in NPV for each of the alternatives, determine which of the 12 factors are key to the estimate, and provide a risk assessment associated with unaccompanied housing privatization.

1.7. Methodology

The methodology used in the analysis of this research includes a 50-year cost estimate for each Air Education and Training Command bases using 9 cost and benefit factors that incorporates the OSD Housing Privatization Life Cycle Cost policy. The cost estimation model will utilize inflation and normalize all costs in NPV. Additionally, the common risk factors for unaccompanied privatization will be analyzed, and grouped into common risk categories. In addition, the categories will be ranked based on probability of occurrence and a risk prioritization matrix will be developed to depict the amount of risk the Air Force is assuming through the status quo, privatization, and identical FSRM alternatives.

1.8. Research Questions

Upon reviewing the literature, the following research questions became evident and were addressed by this project:

1. Can the Air Force provide cost savings through unaccompanied housing divestiture?
2. Which economic factors drive the rank-order of alternatives with respect to unaccompanied housing?
3. How much risk will there be in transferring unaccompanied housing to the private sector?

These research questions will facilitate the Air Force initiative to save money and provide the best possible living facilities for our Airmen.

1.9. Support

The support needed to complete this analysis included individual base Interim Work Information Management System data and AFCEC Military Family Housing Economic Analysis for each Air Education and Training Command base. The individual base IWIMS data was needed to ensure the accuracy and completeness of the O&M portion of the 50-year cost estimates, and the AFCEC Military Family Housing Economic Analysis is needed to guide unaccompanied housing cost estimation.

1.10. Summary

This chapter described the rationale regarding Air Force unaccompanied housing privatization and established the problem based on previous research and the current Air Force environment. Additionally, the need for cost savings and potential privatization alternatives were presented. Moving into Chapter II, an exploration of the accompanied

housing privatization literature along with current dormitory conditions, current Air Force fiscal challenges, and the importance of the cost and benefit factors will be explained to fully understand the significance of this research.

II. Literature Review

This chapter provides an in-depth detail of essential knowledge that pertains to Air Force unaccompanied housing privatization. Moreover, this chapter will also be utilized to select a modeling strategy to minimize United States Air Force costs while improving the quality of life for junior enlisted Airmen. Additionally, the literature review will describe in detail each factor associated with the 50-year cost estimate, and how the cost estimate will be utilized in the final research model. Finally, the risks associated with privatization are outlined, and the methodology for quantitating the risks as well as the Housing Requirements and Marketing Analysis process is explained. The literature review is divided into seven main sections, with each section providing additional understanding in particular aspects of the research effort.

2.1. A Brief History of Air Force Partnerships

The United States Air Force has a long history of partnerships that date back to 1996 with the introduction of the Military Housing Privatization Initiative (MHPI) (GAO-14-313, 2014). The MHPI implemented a plan to privatize existing housing infrastructure and laid the foundation for Air Force partnerships. After 20 years of Air Force privatization, the Air Force implemented a new partnership initiative to provide overarching partnership guidance. In 2013, the Air Force partnership program was formally implemented and named the Air Force community partnership program (DoDI 4000.19, 2013). With the presence of the new Air Force community partnership program, all partnerships initially fell within two distinct categories: 1) Public-Public-Private partnerships (P4) and Public-Private partnerships (P3) or 2) privatization.

P4 and P3 partnerships have been used to leverage both state and local governmental and/or private resources with federal government resources in an effort to provide a mutually-beneficial situation. More specifically, P4 partnerships are intergovernmental agreements, which allow for mutually-beneficial provision of services, as well as the leveraging of resources and best practices to achieve cost efficiencies or reductions in risks (AFPD 90-22, 2014). However, P3 partnerships are agreements and contracts between military installations and the private sector (which include for-profit and not-for-profit organizations) with the intent to enable mutually-beneficial provisions of services and leverage resources to achieve cost efficiencies or reductions in risks (AFPD 90-22, 2014). Although they differ with whom they partner, P4 and P3 partnerships are similar in nature but, until recently, have been considered fundamentally different from privatization.

Privatization is defined as the private sector financing, ownership, operation, and maintenance of military housing (GAO-14-313, 2014). As the oldest of the three forms of partnerships in the Air Force, privatization is considered a form of Public-Private partnership that is separate and operated through a self-sustaining function within the Air Force Civil Engineer Center (AFCEC, 2016). AFCEC is responsible for the short and long-range development and management of the Air Force's privatized housing programs, which include the entire accompanied housing inventory (AFCEC, 2016).

According to Savas (2010), “The term ‘public-private partnerships’ is particularly malleable as a form of privatization” (Savas, 2010). This definition provides the linkage between Air Force community partnerships and privatization. Privatization is considered one avenue of Air Force P3 partnerships, but it is a separately managed entity within

AFCEC (AFCEC, 2016). As the ideology and policy of Air Force community partnerships evolves, privatization is moving from a mutually-exclusive alternative to a subset of P3 partnerships.

2.1.1. Public-Public-Private (P4) and Public-Private (P3) Partnerships

Since its inception in 2013, Air Force Bases across the United States have adopted P4 and P3 partnerships. P4 and P3 partnerships are contractual relationships between federal public agencies and state or local public agencies or a private company (Smith, Currie, & Hancock, 2009). Based on current fiscal realities experienced by the Air Force, P3 and P4 partnerships are gaining in popularity due to the ability of the public and private sectors to come together and deliver a facility or service for the use of the general public (Smith, Currie, & Hancock, 2009). The underlying goals of P3 and P4 partnerships are to leverage private, state-public, and local-public agencies capital to fund federal-public agency projects while allowing the federal-public agency to creatively finance the projects. Consequently, the private, state-public, and local-public sector shares the risks and benefits of the P3 and P4 agreement with the federal-public sector. In theory, the P3 and P4 partnerships are win-win situations, because public agencies can deploy the private, state-public, and local-public sector to accomplish federal-public goals (Smith, Currie & Hancock, 2009).

Currently, there are 119-signed P3 and/or P4 partnership agreements across 30 different Air Force Bases. Furthermore, there are 16 different types of agreements between various Air Force Bases and their public or private sector organizations. Figure 2 outlines the frequency of the different P4 and P3 partnership agreements based on agreement type. This Figure illustrates that the Air Force Community partnership

program only tracks P3 and P4 partnerships and completely disregards privatization as a mutually-exclusive alternative.

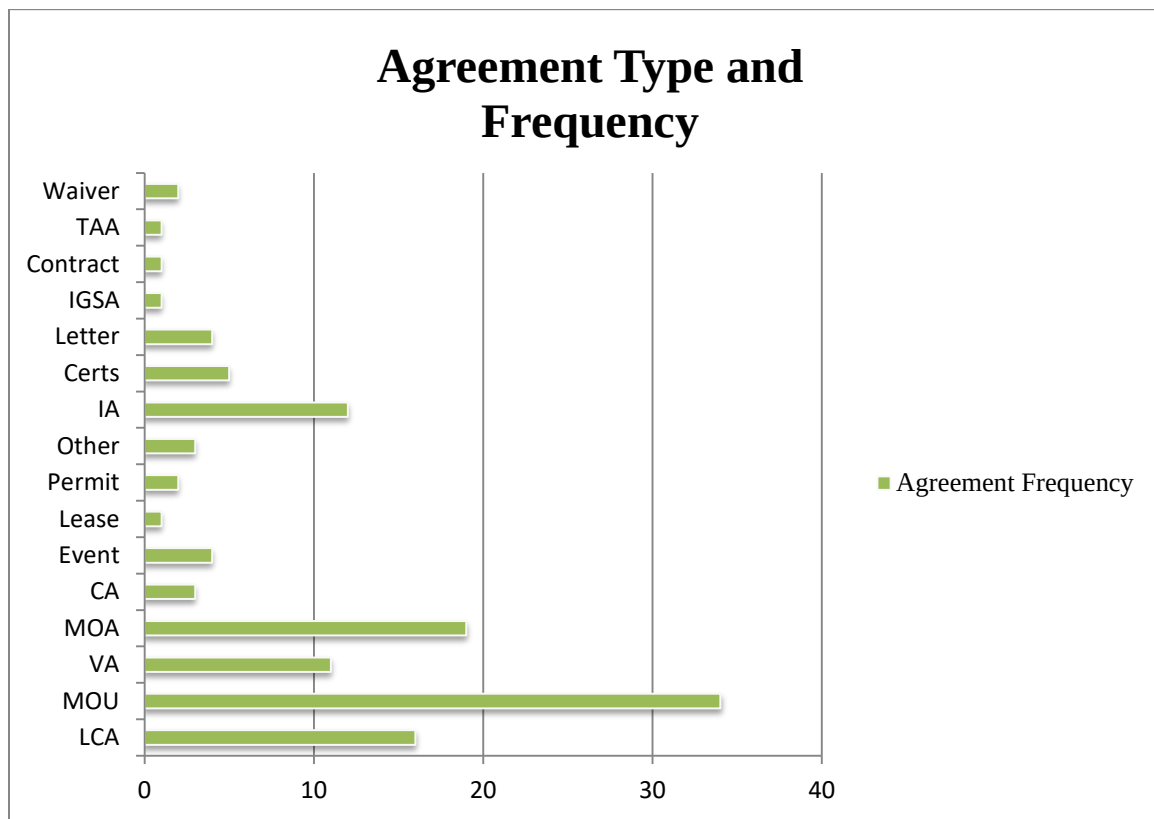


Figure 2: Agreement Type and Frequency (AFCPP, 2015)

Although originally determined to be mutually exclusive, the current economic situation has brought privatization to the forefront as a possible P3 strategy moving forward. While still centralized by AFCEC and independently ran, Air Force leaders have begun to look towards privatization as a partnership strategy moving forward. Based on the definition by Savas (2000), “... It is defined broadly as an arrangement in which a government and a private entity, for-profit or nonprofit, jointly perform or undertake a traditionally public activity” privatization is linked directly to P3 partnerships (Savas, 2000). With privatization being seen as a P3 partnership mechanism, privatization is

being explored as a technique to lower costs in unaccompanied housing (GAO-03-602, 2003).

2.1.2. Privatization

The United States Air Force first introduced partnerships in 1996 through privatization. As the oldest and most well-known form of partnership, privatization has been used over the past 20 years as the mechanism to sustain our accompanied housing. Although privatization has served as the partnership of choice for accompanied housing, there have been numerous changes to the program over the years.

As previously stated, Congress enacted the Military Housing Privatization Initiative (MHPI) in 1996 (GAO-14-313, 2014). Shortly after the MHPI was enacted, Air Education and Training Command was directed to establish a process to execute a project for privatization (Moriarty, 2016). With Air Education and Training Command as the agent responsible for implementing housing privatization, the inaugural privatization project in 1998 at Lackland Air Force Base delivered 420 new housing units and solidified the Air Force commitment to establish a housing privatization program (Moriarty, 2016). Following the success at Lackland Air Force Base, the United States Air Force designated AFCEE the Center for Housing Excellence (Moriarty, 2016). In 2003, seven years after the initial success at Lackland Air Force Base and the designation of AFCEE as the Center for Housing Excellence, the authority to approve privatization was delegated to major command vice commanders, who were the source selection authorities; however, AFCEE continued to lead concept and proposal development, solicitation and acquisition (Moriarty, 2016). Three years later in 2006, the Air Force centralized the privatization program, bringing back the source selection to AFCEE (Moriarty, 2016). The final change

within in the privatization program occurred in 2012 as the Air Force activated a single unit to execute Civil Engineering missions worldwide (Moriarty, 2016). Currently, the Air Force depends on the Air Force Civil Engineer Center (AFCEC) to centrally manage the program and provide oversight and consultation regarding encountered issues (Moriarty, 2016).

After experiencing the success of accompanied housing privatization through the MHPI, the Air Force should to focus their effort on the potential cost savings that the privatization of unaccompanied housing could provide. Following years of transition, the Air Force now has a centralized privatization program at AFCEC, which could easily expand into unaccompanied housing. Privatization has been proven to provide increased quality of life for Air force Airmen while reducing costs and the Air Force has a long history of successful privatization projects. With a known successful commodity in accompanied housing privatization, the Air Force must inquire whether the same savings can be realized through unaccompanied housing privatization.

2.2. Current Situation

Amid the aforementioned concern that inadequate military housing was a lead contributor to military members leaving the military, Congress enacted the 1996 MHPI (GAO-14-313, 2014). Shortly thereafter, Taibl (1997) conducted a study that concluded private sector housing industry was able to provide suitable housing to military service members—at half the cost of what the government now spends (Taibl, 1997). The identified problem of inadequate military housing, and designated possible solution of private sector housing, laid the foundation for accompanied privatization; however, there has been no further effort to remedy unaccompanied housing inadequacies through the

privatization of unaccompanied housing. Although no effort has been made to privatize unaccompanied housing, the Air Force has determined that current unaccompanied housing living conditions are inadequate and are in need of renovation.

Through various surveys, the number one concern voiced by unaccompanied Airmen in dormitories has been privacy (Callander, 1999). With the privacy concern in mind, the Department of Defense initiated the 1+1 standard (Callander, 1999). The 1+1 standard, also known as Dorms-4-Airmen, was developed to provide privacy while continuing to promote social interaction of unaccompanied Airmen (DSD Memorandum, 2001). Furthermore, the Air Force Unaccompanied Housing Design Guide (2016) illustrates the design and construction standards for the Dorms-4-Airmen module. The guide is based on the 2001 Office of the Secretary of Defense (OSD) 1+1 standard, which specified gross building area but offered flexibility on module, room size and space layout (AFUHDG, 2016). Moreover, the Dorms-4-Airmen design is a four-bedroom module, which included a private living space/bedroom, bathroom, and closet for each of the four airmen residing in the module.

The Dorms-4-Airmen design differs dramatically from the current set-up where community bathrooms are coupled with private bedrooms, which dramatically decreases privacy for the Airmen. However, in the new Dorms-4-Airmen design, Airmen share a kitchen, social space, and laundry facilities in the module when possible, rather than in a community style set-up (DSD Memorandum, 2001). This new design provides more convenience for the Airmen and provides a greater sense of privacy.

The Air Force recommends a gross module area of 1,140 to 1,228 square feet, which includes a net living area of 129 to 193 square feet (AFUHDG, 2016). However, the

space cannot exceed the maximum gross building area of 355 square feet specified by the OSD. Also, the Dorms-4-Airmen design includes common support areas for all modules in a facility. These areas include a multipurpose area (such as game room, television room, and fitness area), vending area, mailroom, bulk storage (in-room, in-unit, or centralized location), and public restrooms (AFUHDG, 2016). With all of the improvements to the living area for junior enlisted Airmen needed, the current living conditions cannot be sustained, and the status quo is not an acceptable option. Furthermore, as shown in Table 1, the Air Force has 1,129 unaccompanied housing units rated at a Q3 or Q4, which are both inadequate (Neuhaus, et al., 2010).

	Q1	Q2	Q3	Q4
Navy	824	857	1,422	2,898
Marine Corps	2,513	1,230	1,213	327
Army	9,662	2,536	1,405	537
Air Force	5,329	462	652	477

Table 1: 2009 Unaccompanied Housing Units by Q-Rating (Neuhaus, et al., 2010)

Through the combination of current inadequate living conditions and the need to provide improvements to living conditions with the Dorms-4-Airmen initiative, the Air Force must look at all available options to provide improved unaccompanied housing quality at the lowest possible cost. Table 2, pictured below, details the total unaccompanied housing inventory in the Department of Defense (DoD) as of 2009 (Neuhaus, et al., 2010). The Air Force owns 23.8 million square feet of the unaccompanied housing, which accounts for 21% of the DoD unaccompanied housing inventory (Neuhaus, et al., 2010). With 21% ownership of the entire DoD unaccompanied housing inventory, the total plant replacement value (PRV) of Air Force unaccompanied housing is an estimated \$14,194,110,000.00 (Neuhaus, et al., 2010). With 16% of Air Force unaccompanied

housing currently rated inadequate, the PRV for the inadequate housing is \$2,315,773,149.00, which further illustrates the costs associated with renovating the inadequate unaccompanied housing. With those costs in mind, the Air Force must pursue the most cost-efficient means of upgrading the current inadequate unaccompanied housing.

Category	Floor Area (million sf)	PRV (million \$)	Cost/sf (\$)
All types of UPH	243.7	67,591	277
Active-duty UPH	159.2	47,557	298
Active-duty UPH	110.9	32,252	292

Table 2: 2009 Average UPH Replacement Value (Neuhaus, et al., 2010)

When considering the need for improved living conditions and the costs associated with renovating current inadequate unaccompanied housing, the Air Force must revisit the possibility of unaccompanied housing divestiture as a means to potentially reduce future costs. The PRV of existing inadequate unaccompanied housing infrastructure, combined with the Air Force's inability to fund all Sustainability, Restoration, and Modification (SRM) requirements outlines the need to explore alternative unaccompanied housing funding sources (Neuhaus, et al., 2010). With the private sector being able to meet all Air Force housing needs, and privatization already a successful Air Force program, the Air Force revisit the possibility that privatization may reduce costs and improve unaccompanied housing conditions.

2.3. Air Force Directives

Each year, the Department of Defense (DoD) spends billions of dollars to house unmarried junior enlisted service members (GAO-03-602, 2003). From 2003 to 2016, the Army, Navy, and Air Force planned to spend \$6 billion to eliminate barracks with multi-person bathroom facilities and provide private sleeping rooms for all permanent party members (GAO-03-602, 2003). With the \$6 billion dollar cost of the program, the DoD looked at (1) the status of efforts to examine the potential for private sector financing, ownership, operation, and maintenance of military barracks; (2) the opportunity to reduce the construction costs of barracks through widespread use of residential construction practices; and (3) whether opportunities exist to make better use of existing barracks (GAO-03-602, 2003).

Although the DoD planned to eliminate all barracks and improve inadequate unaccompanied housing in 2003, the DoD had not determined whether privatization was feasible and cost-effective (GAO-03-602, 2003). Furthermore, the DoD concluded that a collaborative, rather than independent, approach could minimize duplication and optimize lessons learned with respect to unaccompanied housing privatization (GAO-03-602, 2003). While this need was documented in 2003, no further action has been documented in any Air Force Directive.

Even though unaccompanied housing privatization has not been pursued by the Air Force, dormitories continue to be included in Air Force Policy. In the 2007 Air Force Posture, the Air Force programmed 3,000 dormitory rooms for funding over six years with 75% of the initiatives to rectify inadequate dormitory conditions for permanent party members (Wynne & Moseley, 2007). Although the 3,000 dormitory rooms were

programmed for funding, the 2016 Air Force Posture stated that the Air Force took risk in infrastructure and did not all programmed projects were actually completed (James & Welsh, 2015). The 2016 Posture statement stated that although 3,000 dormitory rooms were programmed for funding, the Air Force determined that the dormitories are a lower priority than the mission. Furthermore, the 2016 Air Force Posture explained that budgetary constraints have spurred the Air Force to re-evaluate the way it does business with its installations' host communities and seek alternatives to the status quo (James & Welsh, 2015). This means the Air Force could possibly no longer have the funds available to renovate existing unaccompanied housing units and must consider other avenues to rectify the inadequacies.

The documented DoD need to pursue feasibility assessments of unaccompanied housing privatization coupled with the emphasis placed on wise monetary decisions, demonstrates the potential need for unaccompanied housing privatization. Furthermore, with the current inability to fund unaccompanied housing endeavors, the Air Force has directed personnel to seek alternatives to SRM, as well as MILCON, in an effort to save money. With partnerships in the forefront and privatization seen as a successful tool, the Air Force should explore the option to privatize unaccompanied housing to eliminate inadequate housing and potentially decrease government costs.

2.4. Air Combat Command Business Case Analysis

The purpose of the Air Combat Command business case analysis was to examine the possibility of privatizing Air Combat Command unaccompanied housing (ACC, 2009). Furthermore, the purpose of the report was to identify critical feasibility issues and develop a prototypical unaccompanied housing privatization case (ACC, 2009). The business case

analysis presented key findings, outlined the study scope, provided background information, reviewed qualitative aspects of the study, discussed market risks, determined design concepts, described project configuration, included revenue sources, estimated project costs, illustrated project financing and feasibility, mentioned additional risk factors, and presented the final conclusion that further investigation is needed.

2.4.1. Business Case Findings

The key findings found in the Air Combat Command business case analysis involved project definition, project funding and housing assignments, and project scope and financial feasibility. Within project definition, the goal was to provide safe, good quality, energy efficient, well-managed, affordable, self-sustaining long-term housing to unaccompanied personnel (ACC, 2009). Additionally, the unaccompanied housing units should be market style in order for the units to compete with housing in the respective market of the installation (ACC, 2009). Furthermore, rent must be market-based, and the amenities and features must be competitive (ACC, 2009). Moreover, the unit configuration must be based on the market style concept of two unaccompanied persons sharing a two-bedroom unit to provide adequate privacy (ACC, 2009). Finally, the focus must be for junior enlisted unaccompanied personnel, who would be required to live on base in government housing (ACC, 2009).

The findings associated with project funding and housing assignments centered on Basic Allowance for Housing (BAH) and authority. In order to fund the projects, the Secretary of Defense must authorize the Air Force to pay a higher rate of partial BAH to unaccompanied members residing in the privatized units. Moreover, the partial BAH must be market-based rates and provide necessary revenue to fund the privatization projects

(ACC, 2009). For the final step in project funding, the Secretary of the Air Force must have the authority to assign unaccompanied Airmen to privatized housing units to limit their use of BAH to the privatized housing (ACC, 2009). This means that each Airman would be specifically assigned to privatized housing to ensure that the proper BAH levels are achieved.

After the conclusion of the study, Air Combat Command concluded that unaccompanied housing privatization is financially feasible; however, there are stipulations to that finding. For unaccompanied housing privatization to be feasible, the government must provide unaccompanied housing units to members who are ineligible for partial BAH, those who require special training or members who need further guidance (ACC, 2009). Furthermore, each Major Command must pursue necessary authorization from Congress for increased partial BAH and assignments to privatized housing (ACC, 2009). Although the conclusion that unaccompanied privatized housing is financially feasible, the report determined that further investigation into unaccompanied housing privatization is needed to identify potential feasible sites and packages (ACC, 2009).

While this study determined that it is financially feasible to construct unaccompanied privatized housing, the findings are incomplete because the study did not utilize existing operations and maintenance (O&M) data to analyze O&M costs. Additionally, the findings did not discuss the reasoning behind choosing Minot Air Force Base as the location to draw conclusions across ACC. Finally, the study did not mention the reasoning to deviate substantially from the accompanied housing privatization model.

2.4.2. Study Scope

Air Combat Command scoped the report to Minot Air Force Base, where there are no definitive plans or specific sites identified for new facilities (ACC, 2009). The assessment for whether privatized housing is feasible for the study was based on concept designs and assumptions—with the most important assumption being that any proposed project must develop competitive, market-style housing units (ACC, 2009). While this assumption is not inherently wrong, the basic need is the Dorms-4-Airmen configuration, which was not mentioned. The unaccompanied housing must be comparable to the market but does not need necessarily match the market.

Following the market scope, the study was scoped to junior enlisted personnel with pay grades E4 and fewer than three years of service, as well as E3 and below, ensured that the study targeted the members required to reside on base (ACC, 2009). In addition, the scope assumed that project funding required development costs, as well as continuing revenues, from the rental of privatized housing (ACC, 2009). Moreover, the funding concept assumed that unaccompanied members will receive market-based partial BAH, and it was assumed to be available to members for the purpose of leasing the privatized housing units (ACC, 2009). Scoping the project to include only junior enlisted and BAH to fund the privatized housing operations are sound assumptions that coincide with the privatized accompanied housing model.

2.4.3. Background Information

With privatization of Air Force accompanied housing reaching maturity, the study found that bringing Air Force unaccompanied housing into the privatization process is the next step. However, unaccompanied housing privatization is not new to the DoD. The

study found that the Army is in the process of unaccompanied housing privatization (ACC, 2009). Furthermore, in South Korea, E1-E4 Army personnel share bedrooms and bathrooms, and E5 personnel and above are assigned private rooms (ACC, 2009). Within the United States, the study determined that E1-E4 Army personnel share bedrooms and bathrooms (ACC, 2009).

While the study stated that the Army is in the process of unaccompanied housing privatization, the Navy has moved forward with unaccompanied housing privatization as well. Congress granted Navy authority for three pilot privatization projects (ACC, 2009). With two of three authorized programs underway, Navy has requested Congressional extension of their program (ACC, 2009).

The study found that the key program elements include: 1) service members have a housing choice, 2) service members sign leases for the housing unit, 3) each member is responsible for their lease, and 4) authority to pay a market-based higher rate of partial BAH to unaccompanied personnel (ACC, 2009). In addition, the Navy pilot projects were found to be market-style units that consisted of high-rise, mid-rise, and garden style apartments (ACC, 2009). High-rise apartments would be impossible to build on Air Force bases due to the aircraft and antiterrorism requirements. However, in the Navy privatized housing model, the privatized housing unit functions as a private facility with no command inspections (ACC, 2009). To meet this requirement, the study found that housing must be located off base or on a severable on-base location where civilians can frequent (ACC, 2009). While this could possibly circumvent the aircraft and antiterrorism requirement, the Air Force has demonstrated a resistance to fully eliminate the command and control aspect of unaccompanied housing.

2.4.4. Qualitative Aspects

The study found that the qualitative aspects concerned with privatized unaccompanied housing included basic necessities as well as the market style. The study found that at a minimum, privatized housing must offer the amenities and conditions experienced by those not living in privatized housing (ACC, 2009). In addition, the units must be similar in size and style with private sector units; must have washer and dryer; a common living, dining, and kitchen area; furnished bed and common rooms; adequate parking; and be built to local codes and market standards (ACC, 2009). The study also found that the rent must include utilities and renters insurance with tenants responsible for telephone, cable, and Internet access (ACC, 2009).

2.4.5. Market Risks

Through the implementation of market-style units, project risk is minimized; as the privatization owner will be better able to market the housing to the community should the military demand decline through mission changes or downsizing (ACC, 2009). Additionally, the study found that there must be sufficient community demand to offset the potential decline in military personnel (ACC, 2009). Moreover, the study stated that privatization projects in or near small communities might be packaged with projects at other locations in order to spread the risks over more units and different market places (ACC, 2009). Each of the market risks spurred from the assumption that military members would not choose unaccompanied privatized housing when given the opportunity to live off-base and/or the possibility of military reduction. However, contract clauses and provisions that directly address those concerns could remedy both of those situations. Furthermore, if privatized unaccompanied housing is only offered on base, the market risk

is greatly diminished. With all privatized accompanied housing units offered on base, the assumption that unaccompanied privatized housing must be off base is a flawed assumption and should not be made.

2.4.6. Design Concepts

The study found that Navy and Army Unaccompanied Privatization programs developed similar design concepts. Furthermore, the designs were founded on the concept of two persons sharing a unit (ACC, 2009). In this scenario, two partial BAHs are the funding source. For the Navy, presented in Figure 3, the floor plans for several two-bedroom units that are 800 to 900 gross square feet with two bedrooms are shown.

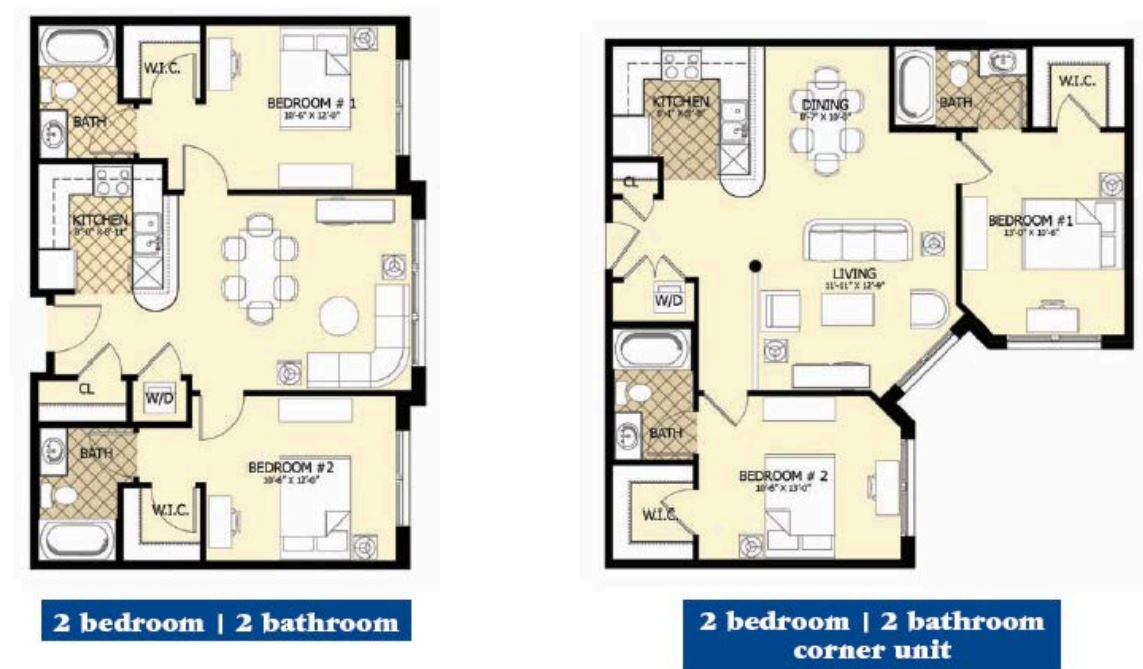
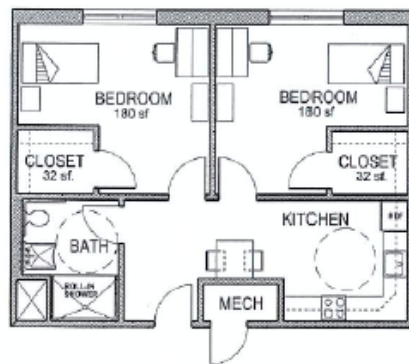
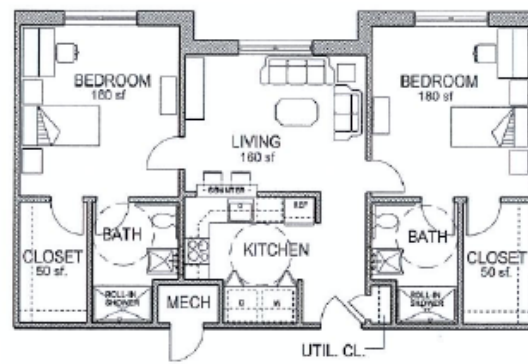


Figure 3: Navy Unaccompanied Privatized Housing Units (ACC, 2009)

The Army units, presented in Figure 4, are one-bath units with slightly smaller total gross square footage (ACC, 2009).



2-Bedroom, 1-Bath Apartment
530 GSF / Soldier



2-Bedroom, 2-Bath Apartment
675 GSF / Soldier

Figure 4: Army Unaccompanied Privatized Housing Units (ACC, 2009)

The study found that in each design, the apartments in that size range were comparable to available units in the Minot, North Dakota region (ACC, 2009). Furthermore, Table 3 shows the distribution of rental housing by price in Minot, North Dakota.

Rent (\$)	Units
Less than 100	94
100-149	107
150-199	170
200-249	166
250-299	269
300-349	400
350-399	606
400-449	796
450-499	803
500-549	447
550-599	404
600-649	333
650-699	223
700-749	100
750-799	198
800-899	83
900-999	32
1,000-1,249	5
1,250-1,499	13
1,500-1,999	91
2000+	61

Table 3: Rental Units by Price, Minot, ND (ACC, 2009)

With the median gross rent at \$507 per month from Table 3, the study found that privatized housing may need to consider trade-offs between desired size and amenities to meet the privatized program compared to the local market (ACC, 2009). Moreover, when looking at rental units offered in Minot, North Dakota, the complexes are not furnished but offer garages, washer and dryer, dishwasher, exercise room, and elevator. With exception of electricity, all other utilities are provided (ACC, 2009). Table 4 shows the tenant prices for the apartment complex with the aforementioned amenities.

Bedrooms	Baths	Sq Ft.	Price	Deposit
1	1	819	\$725	\$400
2	2	1040	\$825	\$500
3	2	1362+	\$940	\$500
Efficiency	1	570	\$500	\$600

Table 4: Rental Units Offered by Complex 1, Minot, ND (ACC, 2009)

The second complex has fewer units but pays all of the utilities, has free laundry, elevator, a swimming pool, garage, and exercise room (ACC, 2009). Table 5 presents the rental prices for the second complex.

Bedrooms	Baths	Sq Ft.	Price	Deposit
1	1	636-784	\$625-\$645	\$400
2	1	900	\$770-\$795	\$500
2	2	1000	\$780-\$800	\$500
3	2	1505	\$925	\$600
3	2	1161	\$880	\$600

Table 5: Rental Units Offered by Complex 2, Minot, ND (ACC, 2009)

While Tables 3-5 show that the average cost for a one-bedroom apartment ranges from \$507 to \$725 on average, the Air Force has developed the Dorms-4-Airmen concept which would provide four bedrooms with a private bath in each unit (ACC, 2009). Additionally, the units would have common living areas. These larger units are more efficient and cost effective, which will further drive down the average partial BAH required for each military member. The study dismissed the Dorms-4-Airmen concept as not being able to provide sufficient demand for the market if military members are no longer present but, as mentioned before, the wording of the contract and potential buyouts should that become the case, would provide more leverage to provide the Dorms-4-Airmen concept.

2.4.7. Project Configuration

For this study, it is assumed that the project will be built on available Air Force land close to existing infrastructure, so there is minimal cost to provide the housing units with necessary utilities and infrastructure, as well as where civilians could have access (ACC, 2009). This scenario completely underscores the potential gains the Air Force would receive from selling or providing the current unaccompanied housing inventory to

the privatized company. The Air Force would benefit from this transaction by providing infrastructure to the contractor, and the contractor would benefit from not have to start from scratch. Additionally, the Air Force has already outfitted 5,329 units with the Dorms-4-Airmen concept (Neuhaus, et al., 2010). In situations where the Dorms-4-Airmen concept is already instituted, the Air Force would be selling the operations and maintenance of the facilities to the contractor and should gain a considerable sum of money for the existing infrastructure. As stated before, the assumption that the Air Force must open the unaccompanied housing to the civilian sector is also incorrect, and the Air Force can provide compensation for the contractor risk. This would allow the Dorms-4-Airmen concept to be applied to all unaccompanied housing and save the contractor, as well as the Air Force, money over time.

2.4.8. Revenue Sources

The feasibility of unaccompanied housing privatization is based on the availability of partial BAH to members who are unaccompanied and currently living in government housing (ACC, 2009). Table 6 illustrates the amount of partial BAH that would be adjusted to market conditions at Minot, North Dakota (ACC, 2009). The \$608 BAH would provide more than enough money to pay for the current market rates at Minot. Furthermore, the cost efficiency associated with utilizing current Unaccompanied Housing units as well as the Dorms-4-Airmen concept would lower the needed BAH for the Minot area.

Grade	BAH
E4	\$608
E3	\$608
E2	\$608
E1	\$608

Table 6: BAH Rates for Unaccompanied Personnel, Minot, ND (ACC, 2009)

While the Air Force will be paying BAH to the members, the total cost of ownership for unaccompanied housing should be taken into account. The potential partial BAH needed, and current market conditions, show that it would be beneficial for the Air Force to privatize unaccompanied housing at Minot, North Dakota.

2.4.9. Project Costs

The cost of building a new apartment complex was determined through RS Means 2008 in the study. Table 7 provides the median estimate, as well as the upper and lower quartiles, for dormitory construction.

Stories	Lower 1/4	Median	Upper 3/4
1 - 3	\$62.50	\$78.50	\$105
4 - 7	\$83.00	\$100	\$124

Table 7: 2008 RS Means Building Construction Cost Data (ACC, 2009)

The median estimates were used and multiplied by the square footage needed for each facility to determine the total project costs in the study (ACC, 2009). While the study

delved into the cost of building new facilities, the utilization of existing facilities will decrease project costs and eliminate the need for constructing new facilities.

2.4.10. Project Financing and Feasibility

Financial feasibility means that the unaccompanied privatized housing units will be sustainable for the long term (ACC, 2009). Sufficient revenues must be realized to fund operating and maintaining the facilities, cover debt service, and recapitalize the project over the useful life of the project. However, through the utilization of existing infrastructure, partial BAH will fund operating and maintenance, as well as the recapitalization costs of potential renovations. This means partial BAH, and the utilization of current infrastructure, renders unaccompanied housing privatization financially feasible.

2.4.11. Risk Factors

The key risk factors for unaccompanied housing privatization are downsizing the mission at Minot Air Force Base, competitiveness of the privatized housing units, and the distance from base to the city of Minot. Each of these risk factors could be decreased with a package privatization deal with other bases; however, lower revenues at Minot may offset revenues at other locations and cause the entire package not to be viable (ACC, 2009). These risk factors must be taken into account at every location, and are extremely important to note in privatization discussions.

2.4.12. Study Conclusions

The Air Combat Command business case analysis found that unaccompanied housing privatization is dependent on obtaining the authority for junior enlisted Airmen to receive a higher rate of partial BAH. Additionally, the study found and there are financially viable options for unaccompanied housing privatization (ACC, 2009). Through the

Dorms-4-Airmen concept, and utilization of current infrastructure, the Air Force could lower the partial BAH demands and potentially provide a more feasible scenario to privatize unaccompanied housing. While this study found feasible scenarios, the utilization of the accompanied housing privatization methodology, combined with aspects from this study, opens the possibility determine that privatization has the potential to provide the lowest total cost of ownership for the Air Force with respect to unaccompanied housing.

2.5. Accompanied Housing Privatization Methodology

The purpose of the accompanied housing privatization methodology is to compare the life cycle costs of the three government alternative execution methods: status quo, privatization, and identical MILCON. The methodology utilized by accompanied housing privatization is in accordance with the OSD Housing Privatization Life Cycle Cost Policy. Furthermore, the assumptions used for the analysis are estimates, time sensitive, and subject to change based on current conditions.

2.5.1. Accompanied Housing Life Cycle Cost Alternatives

The accompanied housing life cycle cost alternatives fall into three distinct categories: status quo, privatization, and Identical MILCON. A 50-year estimate is provided for each execution category, and a sensitivity analysis is used to determine the most important factor for each execution method (AETC Group I, 2005). The objective of this methodology is to provide the most adequate and cost-efficient housing method.

2.5.1.1. Status Quo

Through the status quo alternative, the project will retain all current military family housing units (AETC Group II, 2007). Moreover, no major development will take place, which means that no further construction or renovation will take place. All work completed

on the housing units falls under currently-funded MILCON projects; Routine Operations and Maintenance (O&M) such as demolition, housing maintenance, ground maintenance, refuse collection, snow removal, pest control and recycling; and Periodic O&M (AETC Group II, 2007). In this scenario, military members do not get paid BAH and have no out-of-pocket expenses (AETC Group II, 2007). However, based on the current inventory of inadequate housing and Air Force push for the Dorms-4-Airmen concept to provide more privacy, the status quo has been proven to be unacceptable. The status quo provides a basis for comparison between privatization and identical MILCON, and should not be thought of as a viable solution moving forward.

2.5.1.2. Privatization

The purpose of the privatization alternative is to determine Government costs when the private sectors completely own and operate the accompanied housing inventory (AETC Group II, 2007). Under privatization, the contractor obtains all housing and supporting units by deed and leases the underlying land to the Project Owner (PO) for a 50-year term (AETC Group II, 2007). The PO is responsible for demolition, renovation and construction of new facilities, and must operate and maintain the facilities on a daily basis (AETC Group II, 2007). Throughout the 50-year time horizon, military tenants receive BAH, pay rent to the PO through an allotment, and pay their respective utility services for electricity and natural gas (AETC Group II, 2007). The PO pays for the remaining utilities, including all utilities for common areas, as well as refuse collection and disposal. In this scenario, the only governmental cost is BAH; all other infrastructure costs are the responsibility of the PO (AETC Group II, 2007).

2.5.1.3. Identical MILCON

The Identical MILCON alternative presents a direct comparison of the privatization alternative through government-led operations. In this scenario, the government performs demolition, renovation and new construction with a comparable schedule and scope as the privatization alternative, but using government costs (AETC Group II, 2007). Under Identical MILCON, the government retains ownership of all accompanied housing units and ancillary facilities. Furthermore, the government performs all Routine and Periodic O&M, and pays for all utilities (AETC Group II, 2007). Construction is in accordance with military construction codes and specifications, and military members forfeit BAH with no out-of-pocket expenses when living in accompanied housing (AETC Group II, 2007). With the Air Force taking risk in infrastructure and the current lack of SRM funds, this option may not be a viable contender moving forward (Wynne & Moseley, 2007 and Johnson, 2015).

2.5.2. Comparison Items

This analysis identified 12 government cost and benefit items that were used for comparison. The governmental cost and benefit items were: BAH, Impact Aid, MILCON, Periodic O&M, Routine O&M, Utilities, Moves, Manpower, Scoring, Real Estate, Project Management, and Out-Year Renovations. Each of these 12 items is separate and distinct in sensitivity and definition.

BAH is defined as the monthly housing expense payment to a military member (Defense Travel Management Office, 2016). Impact Aid is defined as the annual predetermined subsidy paid by the Department of Defense and/or the Department of Education to local school districts for each child living on base in order to supplement the

tax base. Impact Aid is paid for both children living on government property and on private property, and is higher for children living on government property to compensate for the loss of local property taxes. Finally, the amount of Impact Aid is determined by multiplying the weighted average Impact Aid per student, using the amount in the National Association of Federally Impacted Schools Blue book by the number of students at the end state housing inventory (NAFIS Blue Book, 2015).

MILCON is defined as fiscal year appropriation for demolition, construction, or renovation of Air Force accompanied housing facilities (DAU, 2016). In MILCON, the RS Means cost per square foot for housing is multiplied by the individual housing square feet to determine the costs (RS Means, 2016). Periodic O&M is defined as corrective maintenance performed on a facility to restore the facility to normal operating conditions (AETC Group II, 2007). Each individual Air Education and Training Command base will provide yearly preventive O&M costs on their dormitories. Routine O&M is defined as preventive maintenance performed on a facility to increase the useful life of the facility. Each individual Air Education and Training Command base will provide yearly preventive O&M costs on their dormitories.

Utilities are defined as the annual expense for natural gas, electricity, water, sewer, and steam (if applicable) service for housing units and ancillary facilities. The status quo and identical MILCON alternatives were sourced from the Home Energy Saver website or base-provided utility information, if available. Under the privatization alternative, utility costs are zero, as the units are privately owned, and these costs are paid for with the BAH the PO receives (Home Energy Saver, 2016).

Moving expenditures are defined as the total annual cost for moving military members without families (IRS, 2014). These can occur when moving members from the private sector into unaccompanied dorms or privatized dorms, from average annual turnover, or moving members due to renovation or construction of unaccompanied housing dormitories. Manpower is defined as the annual reoccurring cost for Government personnel, who directly support the military families (AETC Group II, 2007). This includes, but is not limited to, housing referral, housing assignments, security forces, and fire department personnel. Under privatization, the PO will reimburse the Government for Fire and Force Protection services with the BAH the PO receives. The information regarding staffing levels will be provided by the installations, and staffing for privatization reflects the AFCEC-recommended levels and installation-provided salaries (AETC Group II, 2007).

Scoring is the Federal Credit Reform Act of 1990 that required the Government to recognize the cost of, and set aside resources for, future losses at the time of obligation. Based on HRO's pro forma, a specific scored cost will be applied to the privatization alternative for each base. Real Estate is defined as a one-time benefit to the government for selling excess property or cost for purchasing land (AETC Group II, 2007). There is no Real Estate benefit assumed for the alternatives.

Project Management is defined as the manpower or contract cost associated with project development, execution, and long-term portfolio management (AETC Group II, 2007). Costs include site visits, feasibility studies, environmental baseline surveys, environmental analyses, design, construction supervision and overhead, and portfolio management. Under status quo and identical MILCON alternatives, Project Management

is zero, since design and/or SIOH is included as a percentage in the MILCON development costs. Under privatization, the Government will pay Construction Surveillance costs during the IDP and Portfolio Management fees throughout the life of the project (AETC Group II, 2007).

Out-Year Renovations are defined as costs for whole house renovation or replacement beginning approximately at year 37 of the project (AETC Group I, 2005). Under Status Quo alternative, the government incurs no Out-Year development costs. Out-Year renovation costs are estimated at 70.0% of new construction costs. Under Privatization, Out-Year renovation cost is zero, as the cost will be incurred by the PO and does not represent a cost to the government. Identical MILCON is the only alternative to recognize an Out-Year Renovation cost. As each of these factors fluctuate, the gap between Privatization and Identical MILCON estimates will expand or contract. These factors provide the basis of the 50-year estimates, and each element is fundamental in preparing the analysis (AETC Group II, 2007).

2.5.3. Sensitivity Analysis

A sensitivity analysis is performed between the final Net Present Value of the Identical MILCON and the Privatization 50-year cost estimate. The analysis tests each alternative's sensitivity to a range of -50% to +50% (Lackland AFB, 2008). The analysis will hold all factors constant while changing the value on one variable (AETC Group II, 2007). The following four factors were determined to have the greatest potential for variance based on historical information: BAH, MILCON, Routine O&M, and the Discount Rate in accompanied housing models (AETC Group II, 2007).

2.5.3.1. Variance of BAH

BAH expenditures are expected to vary the most, have the most uncertainty, and in turn contain the highest potential for impact, since they represent the largest percentage of the total NPV in the Privatization alternative (Lackland AFB, 2008). Furthermore, BAH rates may vary from year-to-year depending on fiscal constraints and market fluctuations; thus, long-term changes to BAH are unpredictable (AETC Group II, 2007). The effect of these assumptions can be identified by a cost sensitivity analysis against the BAH expense item. The BAH expense item will be allowed to vary from -50% to +50 (AETC Group II, 2007). Sensitivity analysis results for the BAH expense item will indicate whether the rank order of the privatization and identical MILCON will change—should the BAH increase by a certain percentage. Such changes in BAH could result in the identical MILCON alternative becoming less expensive (AETC Group II, 2007).

2.5.3.2. Variance of MILCON

The MILCON expense item under the identical MILCON alternative contributes the second highest NPV total (AETC Group II, 2007). MILCON expenditures are expected to vary from year to year due to fiscal constraints (Lackland AFB, 2008). The effect of these assumptions can be identified by a cost sensitivity analysis against the MILCON expense item. The MILCON expense item was allowed to vary from -50% to +50. The results of the sensitivity analysis for the MILCON expense item will indicate whether the Identical MILCON alternative will change, should the MILCON expense item increase or decrease, while other variables are held constant (AETC Group II, 2007).

2.5.3.3. Variance of Routine O&M

Historically, Routine O&M expenditures have been difficult to document under Government operations. As such, the Routine O&M costs identified in this analysis may be subject to considerable uncertainty (AETC Group II, 2007). The Routine O&M expense item under the Identical MILCON alternative contributes is the third highest total in NPV. The Routine O&M expense item was allowed to vary from -50% to +50. The results of the sensitivity analysis for Routine O&M costs have the potential to show whether the identical MILCON alternative will or will not be less expensive, should Routine O&M costs decrease by as much as 50.0%, while other variables are held constant (AETC Group II, 2007).

2.5.3.4. Variance of the Discount Rate

Under the Discount Rate Sensitivity Analysis, the Discount Rate will be allowed to vary from -50% to +50% of the currently prescribed OMB rate (Lackland AFB, 2008). The results of the Discount Rate Sensitivity Analysis will indicate whether the ranking of privatization and identical MILCON alternatives are sensitive to changes in the discount rate (AETC Group II, 2007).

Although different accompanied housing economic analyses varied the sensitivity analysis range, to determine whether each of the aforementioned factors provided a different rank order for privatization and identical MILCON, a range of -50% to +50% will be used. This range will provide the most complete analysis, and eliminate the need to determine which factor may be more or less sensitive to change prior to the sensitivity analysis.

2.6. Privatization Risk

While privatization may provide a win-win scenario between the government and private sector, it does not come without risk. The main categories of risk associated with housing privatization are financial risk and service risk. Each of these areas of risk can be quantified with the Air Force Risk Assessment Matrix and mitigated using proper risk-management planning.

Stories of successful privatization outcomes previously endorsed support to the basic economic theory that the removal of market frictions can lead to more efficient allocations and provide efficiencies through risk sharing and lower agency costs (Li, et al., 2011). However, spectacular failures, such as the market reform in Russia in the 1990s, provided evidence to support the argument that mass privatization can lead to instability and a decline in national economic growth (Stiglitz, 2002).

The growing concern of economic instability combined with the further use of privatization provides credence to the notion that the federal government is unable to fund SRM projects, which increases risk to the private sector (Johnson, 2016). Although unlikely, the private sector assumes the risk that the government will be unable to provide repayment for financing projects and, likewise, the government risks the private entity going bankrupt, while trying to decrease costs through privatization. In each instance, both parties face immense risk associated with privatization that must be taken into account. While the financial risks are obvious, the service risk taken on by both parties provided an underlying risk that needs to be observed.

Although privatization has allowed governments to relieve their financial difficulties, governments have taken risks in the form of high rates and poor service (Park,

et al., 2013). Over the last two decades, over 100 water and sewer systems have been sold or leased to private companies in the United States to compensate for a lack of funding. With the uncertainty in predicting O&M costs, the government has been charged a high rate for the risk with unsatisfactory service in return (Park, et al., 2013). When determining the O&M expenses for unaccompanied housing, the Air Force must understand the potential risk involved and attempt to quantify the risk. If the Air Force fails to do so, it may fall victim to the same high rates and poor service experienced through utility privatization at the state and local government levels.

In an effort to properly assess and quantify the risk associated with privatization, the Air Force must sharpen the subjective military judgment about the future (RAND Corporation, 2009). Additionally, the Air Force must apply a simple framework based on formal risk assessment to properly define and outline the risk (RAND Corporation, 2009). With that in mind, the Air Force can look to the Air Force 5-step risk management process presented in Figure 5 and provide a risk assessment tool like the one depicted in Figure 6 to encountered risk (AFI 90-802, 2013).



Figure 5: 5-Step Air Force Risk Management Process (AFI 90-802, 2013)

Shown in Figure 5, the first step in the risk management process is to identify the hazard. Hazards are any real or potential condition that can cause mission degradation (AFI 90-802, 2013). This would encompass all financial and service risks associated with Privatized Housing. A thorough review of current and planned operations associated with the activity will provide a list of hazards, and the cause of each hazard must be taken into account to identify all hazards associated with the activity (AFI 90-802, 2013).

The second step in the risk management process is to assess the hazards, which involves the application of quantitative and/or qualitative measures to determine the probability and severity of effects (AFI 90-802, 2013). Figure 6 shows a risk assessment matrix that is often used to rank risks according to following measures: exposure, severity, and probability. With each of these measures taken into account, the level of assumed risk is annotated, and a complete risk assessment is produced.

Risk Assessment Matrix			PROBABILITY					
			Frequency of Occurrence Over Time					
			A Frequent (Continuously experienced)	B Likely (Will occur frequently)	C Occasional (Will occur several times)	D Seldom (Unlikely; can be expected to occur)	E Unlikely (Improbable; but possible to occur)	
SEVERITY	Effect of Hazard	Catastrophic (Death, Loss of Asset, Mission Capability or Unit Readiness)	I	EH	EH	H	H	M
		Critical (Severe Injury or Damage, Significantly Degraded Mission Capability or Unit Readiness)	II	EH	H	H	M	L
		Moderate (Minor Injury or Damage, Degraded Mission Capability or Unit Readiness)	III	H	M	M	L	L
		Negligible (Minimal Injury or Damage, Little or No Impact to Mission Readiness or Unit Readiness)	IV	M	L	L	L	L
			Risk Assessment Levels					
			EH=Extremely High H=High M=Medium L=Low					

Figure 6: Air Force Risk Assessment Matrix (AFI 90-802, 2013)

Once a hazard has been identified and assessed, steps three, four, and five deal with developing controls and making decisions, implementing controls, and supervising and evaluating the controls (AFI 90-302). Developing controls and making decisions focuses on providing risk mitigation strategies to the identified risks. Furthermore, the control effects prioritize the effects, and select the controls are determined (AFI 90-802, 2013). This process allows for the best possible control to be picked. After the control is chosen, the implementation must be clear, accountability for the control must be established, and support for the control must be evident (AFI 90-802, 2013). Proper implementation of the control allows for concise supervision and evaluation of the chosen control. Supervision and evaluation of the control allows for continuous improvement as well as documentation of control feedback. Through the utilization of this process, optimum risk management control decisions can be made (AFI 90-802, 2013). The 5-

step risk management process can be used to ensure the best decision is made regarding whether to privatize unaccompanied housing or upgrade the unaccompanied housing in-house.

2.7. Housing Requirements and Marketing Analysis Process

AFCEC provided the foundation for economic analysis with the Housing Requirements and Marketing Analysis (HRMA) process. The HRMA process incorporates Department of Defense (DoD) and Air Force policy and regulation in an effort to define parameters and criteria that must be applied to all economic analyses (AFCEC Portal, 2016). Within the HRMA process, the relationship between the many analytical factors and parameters are specified, as well as how they are to be assessed. The HRMA process is intentionally structured to accommodate changes in policy, regulation, and housing environments (AFCEC Portal, 2016). Furthermore, the process was developed with the recognition that available information for analysis will vary among locations and may not be available at all in certain situations. Professional judgment must be applied in cases where limitations are present, with the understanding that the fundamental Air Force and OSD policies look toward the private sector to provide military member housing needs (AFCEC Portal, 2016). Furthermore, the HRMA process can be summarized in three basic steps:

1. Establish the minimum housing requirement for military housing as defined by Air Force criteria that includes:
 - Sufficient military family housing to maintain a viable military community, housing for Key and Essential personnel, preservation of historic housing, and,
 - Unaccompanied personnel housing for those required to live in government quarters to meet specific training or other requirements.

2. Determine if there is sufficient, suitable, private sector housing for military households not accommodated by the minimum housing requirement. A market analysis is performed that:
 - Begins with the definition of a Housing Market Area;
 - Is based on general economic theory of competitive markets;
 - Quantifies housing supply and competing demand;
 - Allocates a market share to military households; and,
 - Provides a basis for assessing a wide variety of housing markets
 - Encompasses Air Force military installations both domestic and overseas.
3. Determine the total military family/unaccompanied personnel-housing requirement as the sum of the housing necessary to meet any shortfall in the private sector by pay grade and bedroom category plus the minimum housing requirement (AFCEC Portal, 2016).

With previous research establishing the status quo as an unacceptable option, sensitivity analyses were performed between the identical FSRM and privatization alternatives. Sensitivity analysis is a method that examines how a recommended decision depends on estimated cash flows (Eschenbach, 2011). The sensitivity analyses will determine the necessary variance associated with each factor that causes privatization to surpass identical FSRM as lowest net present worth (AETC Group II, 2007). Furthermore, in determining which expense items to be used for the sensitivity analyses, the life cycle cost for each alternative will be produced. The life cycle cost report will determine which items have the greatest potential for variance and will make up the largest percentage of the net present value (AETC Group I, 2005). The sensitivity analysis will be presented to:

1. Make better economic decisions with regards to housing
2. Decide which data estimates merit refinement in our model, and
3. Focus managerial attention on the key variables during implementation (Eschenbach, 2011).

Risk identification and reduction will be completed utilizing the Air Force 5-Step Risk Management Process shown in Figure 5. The risk model will investigate the potential risks identified in the literature and implement the 5-Step process that consists of: 1) identify hazards, 2) assess hazards with a risk assessment matrix as shown in Figure 6, 3) develop controls and make predictions, 4) implement controls, and 5) supervise and evaluate to properly assess unaccompanied housing privatization risk (AFI 90-802, 2013). Furthermore, the risk model will ensure that the Air Force accepts no unnecessary risk associated with unaccompanied housing privatization, and ensures that the risks are categorized based on the potential risks associated with privatization (AFI 90-802, 2013). The inclusion of the risk model provided senior leaders with a calculated risk assessment to combine with the cost analysis. These two models allow senior leaders to make the most informed decision with regards to unaccompanied housing privatization.

The materials and equipment needed for this research were strictly composed of previous base Operations and Maintenance (O&M) data, RS Means cost estimation information, and Excel for NPV cost estimation and sensitivity analysis. The O&M data are needed to determine the estimated military costs associated with O&M for the identical FSRM and status quo alternatives over the next 50 years. The RS Means cost estimation allowed the typical work done on a military base to be estimated based on normal contracted labor. This provided the privatized O&M cost estimate to be accomplished. Finally, Excel will be needed to perform the 50-year cost estimates in NPV as well as the sensitivity analysis for reach factor. While the NPV estimation calculation and sensitivity analysis can be done by hand, Excel will allow the research to

be presented in a clear and concise fashion. Excel will also provide the decision maker the necessary information in easy to understand tables and graphs.

2.8. Summary

This chapter addressed the essential elements of Air Force partnerships and the current situation was explained in detail. Additionally, Air Force guidance regarding partnerships and unaccompanied was provided that described the changing landscape of funding, and privatization was determined to be an alternative worth exploring in an effort to provide the necessary quality of life improvements at the lowest price. Furthermore, the accompanied housing privatization estimation methodology was detailed, and the analysis techniques were presented in an effort to describe the starting point for the unaccompanied housing privatization estimation model. Finally, the common risks associated with privatization were introduced, and the methodology to quantitate potential risk factors was presented. Chapter 3 will detail the methodology associated with providing a 50-year cost estimate and risk analysis for Air Force unaccompanied housing.

III. Methodology

The following chapter introduces the concepts of cost-benefit analysis, sensitivity analysis, risk identification and reduction, and describes how each concept uniquely provided an appropriate methodology for analyzing the air force unaccompanied housing 50-year life cycle cost. Furthermore, this chapter describes the approach utilized to answer the research questions identified in Chapter 1. The overall approach is a combination of methodologies from the disciplines of economic analysis as well as risk analysis. The research approach is divided into five phases: problem identification, cost estimation model development, comparative analysis, and risk assessment model development.

The cost estimation model explained the disparity of cost between the privatization, identical Facility Sustainment, Restoration and Modernization (FSRM), and status quo alternatives. Identical FSRM is used in this research rather than identical MILCON in previous studies because the current inventory of unaccompanied housing will be renovated, not demolished and rebuilt. After the initial 50-year estimate was conducted, the sensitivity analysis will determine which factors have the highest potential to influence the estimate outcome. Moreover, the sensitivity analysis described the range of fluctuation that the variable in question can fluctuate before it redistributes the rank order of the data. However, if the cost estimation model provides a great disparity between privatization and identical FSRM, the sensitivity analysis will not occur because there will be no value added to the research. Instead, a comparative analysis of the most influential factors that drove the cost estimation model will occur. To conclude the research, the risk assessment model determined the level of risks associated with the privatization decision. In totality, this research determined the 50-year cost estimates associated with status quo, identical FSRM,

and privatization; provided a comparative analysis between the identical FSRM and privatization option; and assessed the risk associated with privatizing unaccompanied housing.

3.1. Problem Identification

Problem identification is the recognition of a real-world problem that requires attention, investigation, and correction (Ward, 2013). This recognition comes from the need to provide Airmen with adequate living quarters (GAO-14-313, 2013). Johnson (2015) evidenced the problem that the Air Force is unable to fund the current FSRM requirements. To exacerbate this problem, the Air Force has taken risks in infrastructure over the past three years, where the Air Force investment in maintenance and repair—to include restoration, modernization, sustainment, and new construction to recapitalize Air Force facilities and infrastructure—was just 1.9 percent of the plant replacement value (James & Welsh, 2016). When compared to the previous two to four percent maintenance and repair compared to plant replacement value recommendation by the Building Research Board (Cole, 2004), the Air Force has consistently underfunded all FSRM requirements at a level between \$146.4M and \$3.0744B per year when factoring the Air Force plant replacement value of \$146.4B (GAO-99-100, 1999). The funding disparity is even greater when taking into account the desired funding for restoration, modernization, sustainment and new construction is six to eight percent based on private industry standard; however, the lack of funding has led to degradation and a subsequent steady state at a much lower level—hence the problem. The need for improved infrastructure, combined with the current funding situation, has generated the need to potentially look beyond Air Force capabilities. Based on the success experienced through accompanied housing

privatization, the Air Force needs analyze whether the private sector can realize potential savings. Table 8 shows the estimated savings associated with accompanied housing privatization at Columbus Air Force Base (AFB), Goodfellow AFB, Laughlin AFB, Maxwell AFB, Randolph AFB, and Vance AFB.

Alternative	Status Quo	Privatization	Identical MILCON
BAH	\$109.0	\$742.8	\$46.6
Impact Aid	\$206.4	\$206.4	\$206.4
MILCON	\$0.0	\$0.0	\$205.0
Periodic O&M	\$120.3	\$0.0	\$139.9
Routine O&M	\$229.5	\$0.0	\$220.7
Utilities	\$193.7	\$0.0	\$181.0
Moves	\$43.5	\$46.1	\$48.8
Manpower	\$72.3	\$44.2	\$72.3
Scoring	\$0.0	\$59.0	\$0.0
Real Estate	\$0.0	\$0.0	\$0.0
Project Management	\$0.0	\$40.9	\$0.0
Out-Year	\$0.0	\$0.0	\$234.3
Total NPV	\$974.7	\$1,139.4	\$1,355.1

Table 8: Economic Analysis Table (AETC Group II, 2007)

With approximately \$216 million in savings over the next 50 years through the privatization of accompanied housing at six locations, the potential for cost savings through privatization is evident. The need for cost savings is identified as the problem, and the cost estimation model for unaccompanied housing status quo, identical FSRM, and privatization provided the best economical solution.

3.2. Cost Estimation Model

The 50-year cost estimation model will utilize nine different factors to determine the Net Present Value (NPV) of the 50-year costs for status quo, identical FSRM, and

privatization. The factors that differ from the accompanied housing privatization model are Impact Aid, Real Estate, Periodic Operations and Maintenance (O&M) and Routine O&M, MILCON, and Utilities.

Impact Aid is the predetermined subsidy paid by DoD to local school districts for each child living on base. Across all three alternatives, status quo, privatization, and identical FSRM, Impact Aid will be the same. The research focus of this study is to provide which suitable option, privatization or identical FSRM, is the most cost effective based on a 50-year cost estimate. Considering the research focus, Impact Aid has been ignored because it will be the same across all alternatives and does not provide additional value in the cost comparison.

Real Estate will not be factored into this cost estimation model because the definition for Real Estate in the accompanied housing privatization model is “a one-time benefit to the Government for selling excess property or cost for purchasing land” (AETC Group II, 2007). In this cost estimation model, no property will be sold or purchased—meaning, the Real Estate cost would be \$0 across all alternatives and not provide any value added to the model.

In the accompanied housing privatization model, Periodic and Routine O&M costs were estimated using RS Means. In this model, actual O&M data that spans the previous eight years (2008-2015) for Altus AFB, Columbus AFB, Goodfellow AFB, Keesler AFB, Lackland AFB, Laughlin AFB, Luke AFB, Maxwell AFB, Randolph AFB, Sheppard AFB, and Vance AFB as well as the previous two years (2014-2015) for Ft Sam Houston was utilized to make the new factor O&M. After looking into various accompanied housing Periodic and Routine O&M calculations, using a data set that included actual O&M data

proved to be the most repeatable and reproducible. In this data set, all of the buildings that were considered “dormitories” had both the preventative and corrective maintenance records pulled, and the sum total of all maintenance costs were totaled for each respective year and each respective base. After totaling the O&M costs for each base and each year, the average O&M cost were found for each AFB. The average was calculated over the 50-year total with the yearly inflation and discount factor included in the model. Upon completion of calculating the O&M costs for each year and base with inflation and the discount factor, the 50-year totals were brought to NPV in Excel with the function =NPV (rate, data range).

FSRM Renovation #1 replaces MILCON for the purposes of this research based on the assumption that Air Force dormitories will be completely renovated and not demolished and rebuilt. New construction costs were calculated using the 2016 DoD Facilities Pricing Guide and applying the standard Infrastructure, Design, Supervision, Inspection and Overhead (SIOH), Contingency, and Location cost factors. The demolition costs were calculated based on the Whole Building Design Guide UFC 3-730-01 price of \$29 per square foot multiplied by the existing facilities square footage. After completing the new construction and demolition costs, the new construction and demolition were added together and multiplied by 70 percent per the accompanied housing model estimation that full renovation costs are 70 percent of new construction costs (Continental Group, 2013). That number was then normalized using inflation and the discount rate over the appropriate years, and brought to NPV for each respective base. This number will only be calculated for identical FSRM because the status quo does not include new construction; privatization will be responsible for the new construction under the privatization alternative.

Utilities cost for the dormitories were calculated differently compared to the Utilities cost for accompanied housing. Accompanied housing utilized the Home Energy Saver website to calculate the cost of an average home and normalize it across all accompanied homes on base. The same cannot be accomplished with unaccompanied housing. The average cost for a federal government dormitory was found utilizing the Department of Energy's Energy Index for commercial buildings. The average cost per square foot for federal government dormitories was \$0.81 per square foot each year (DOE, 2016). This number was multiplied by the square footage of the existing facilities and normalized using inflation and discount factors. Finally, the NPV cost was found utilizing the Excel function =NPV (rate, data range) for each facility on each base for each year. While the aforementioned factors deviate from the accompanied housing privatization model greatly, the following factors: BAH, Out-Year Renovations, Manpower, Moves, Scoring, and Project Management are more similar to the accompanied housing model with slight variations.

BAH was calculated by multiplying the number of occupants by the BAH rate for E1-E4 enlisted at each particular location shown in Table 9.

Location	BAH Rates	Per Year
Altus	639	7668
Columbus	651	7812
Ft Sam	1137	13644
Goodfellow	840	10080
Keesler	1098	13176
Lackland	1137	13644
Laughlin	690	8280
Luke	1125	13500
Maxwell	984	11808
Randolph	1137	13644
Sheppard	789	9468
Vance	738	8856

Table 9: BAH Rates per Installation Location (DoD BAH Rates, 2016)

In addition, each year of calculated BAH will be accounted for in Net Present Value (NPV). Net Present Value will account for the time value of money and allow for a true comparison of cost over time with the inflation and discount rate applied to each year. BAH will be paid in the privatization alternative to each occupant, as the Air Force will be required assign members to privatized unaccompanied housing. In the status quo alternative, BAH will be paid to the five percent of individuals who are not living in unaccompanied housing as those five percent are thought to be living off-base. Moreover in the identical FSRM alternative BAH will be paid to those same five percent as the status quo, plus additional Air Force members who are displaced in the FSRM Renovation #1 and Out-Year Renovation. In each alternative; status quo, identical FSRM, and privatization; BAH was calculated utilizing the yearly inflation and discount factor, and brought to NPV.

Manpower was calculated multiplying the number of government personnel that directly supported the unaccompanied military housing facilities by their Base Pay and Benefits consistent with the OMB Circular Number A-76. The status quo and identical

FSRM alternatives will be the same for each base because the same number of individuals will be needed to keep the Air Force unaccompanied housing facilities running. For the privatization alternative, the only positions that will need to be kept are the Housing Officer, Housing Clerk, and attendant to ensure members are placed in privatized unaccompanied housing and to deal with military-related issues. While the privatization alternative will most likely mirror the amount of people working in the housing office, BAH will cover those expenses and the Air Force will not face any direct charge from the contractor. With that in mind, the privatization cost for each location will be the same based on the DoD Manpower needed to keep the office up and running, but there will inherently be more individuals working in the unaccompanied housing offices on the base; however, the DoD will not be directly charged for their services.

Moves were calculated using the average move cost of \$6,727.00, reported by www.stripes.com citing the latest government accountability office (GAO) report, multiplied by the number of occupants for each base and the average Air Force unaccompanied turnover of 35 percent explained in the Housing Requirements and Marketing Analysis: Guidance Manual, for the status quo. Moves for identical FSRM were calculated by using the average move cost of \$6,727.00 by the average unaccompanied Air Force member turnover rate plus the displaced individuals in the FSRM Renovation #1 and Out-Year Renovations because the Air Force would have to move members living in the facility each time the facilities needed renovation. For the privatization alternative, Moves were calculated using the average move cost of \$6,727.00 multiplied by the average unaccompanied Air Force member turnover rate of 35 percent plus the individuals

displaced in FSRM Renovation #1 because the Air Force would have to move those individuals for the privatized company to complete the renovation.

The Federal Credit Reform Act of 1990 required the Government to recognize the cost and assign resources to future losses at the time of contract obligation for Scoring (AETC Group II, 2007). The scored cost is normally based on the HRO pro forma and is only applied to the privatization alternative, as it is the only contractual obligation. Traditionally, the scored cost ranges from four to seven percent on a loan guarantee with the possibility that a Zero Scored Cost exists (Beard, 2003). However, to be as conservative as possible with our estimation, zero percent will be the scored cost, which means that no additional cost to the government will be incurred in the privatization alternative.

The Project Management factor included site visits, feasibility studies, environmental baseline surveys, environmental analyses, appraisals, title searches, boundary surveys, economic analyses, design, construction supervision and overhead, and portfolio management (AETC Group II, 2007). Project Management will only be calculated for the privatization alternative. The Project Management costs are not included in status quo or identical FSRM, because design and SIOH is included as a percentage in the FSRM development costs.

Out-Year Renovations are the costs associated with whole-facility renovation or unit replacement beginning at approximately year 30 of the project. The 30 years are based on the assumption that 16 percent of the inventory must be changed to the Dorms-4-Airmen concept, and all unaccompanied housing units that are renovated have a 30 year useful life based on the Rochester Institute of Technology study that found Dormitories have 30 year useful life before structural repairs are needed. Additionally, the government experiences

zero Out-Year Renovations cost in status quo, as no new construction or modernization will be completed. The Out-Year Renovations are also zero for privatization, as the facilities will be privately owned and the government will not incur the costs. For identical FSRM, the Out-Year Renovation costs will be 70.0% of new construction costs but will be analyzed using the time value of money in their respective year. This will calculate the Out-Year Renovations cost in Net Present Value.

The sum of the nine factors will be added together to determine the final cost associated with the status quo, Privatization, and Identical FSRM alternatives in Net Present Value. Based on the cost estimation model findings, a sensitivity analysis was not necessary.

3.3. Comparative Analysis

The identical FSRM and privatization alternatives were proven to represent the only two viable options with regard to unaccompanied housing (AETC Group I, 2005). Furthermore, the 50-year estimates have shown a substantial gap between privatization costs and identical FSRM costs. While the costs are substantial, a thorough investigation must be performed to determine whether privatization or identical FSRM is the most cost effective solution.

Sensitivity analyses were not performed between the identical FSRM and privatization alternatives based on the wide gap experienced in the cost estimation model. However, exploratory analysis was performed to understand the difference in cost, and provide insight into what factors could help privatization to be a more intriguing option. For privatization to be a more cost effective option BAH would have to be reduced for each person substantially. Each individual would receive a small percentage of their BAH. In

this situation, the privatization contract would potentially become lower than what the military could provide in-house through FSRM.

Alternatively, each privatization contract could include additional facilities and multiple renovations to existing infrastructure around base for the privatization alternative to be comparable. In this option, O&M costs across the entire installation would be reduced, or the Air Force would experience additional facility upgrades. However, this option could be detrimental as the Airmen who need to fix the facility problems may lose valuable experience honing their trade. The third viable option to make privatization more intriguing would be for individuals to receive between a small percentage of BAH and the privatization contract must cover all moving expenses. This could make the privatization alternative cheaper, and it would reduce fiscal burden on the Air Force.

The final scenario that will be compared will analyze what the effect of overly conservative OMB circular discount factors combined with paying residents 25% of their BAH. Higher discount factors will decrease costs in all three alternatives; status quo, privatization, and identical FSRM; however, it will have the largest effect on privatization based on the privatization's high overall costs. In any of four presented scenarios, the privatization alternative would become more comparable to identical FSRM, which will increase the likelihood of privatization being chosen as the best alternative.

After each option was analyzed, risks were identified and compiled to help facilitate the risk assessment model. The scenarios that would make privatization a comparable option were added to the potential risks associated with privatization. The comparative analysis identified risks, coupled with the risks found in the literature, which will provide the foundation for the risk assessment model.

3.4. Risk Assessment Model

The Risk Assessment Model will utilize the Air Force 5-Step Risk Management process and categorize all existing risks into three separate analysis; one for the status quo, privatization, and identical FSRM; utilizing the Air Force risk assessment matrix to take into account additional considerations other than purely economics. The Air Force 5-Step Risk Management process is a continuous, systematic decision-informing process consisting of five primary steps that define the formal Risk Management process associated with deliberative Risk Management planning (AFI 90-802, 2013). The 5-Step Risk Management Process contains five steps: 1) Identify the Hazards, 2) Assess the Hazards, 3) Develop Controls and Make Decisions, 4) Implement Controls, and 5) Supervise and Evaluate; however, only the first three steps 1) Identify the Hazards, 2) Assess the Hazards, and 3) Develop Controls and Make Decisions will be utilized.

In the first step of the Risk Management process, the potential risks will be placed into categories based on economic alternative as well as risk description. This will allow for a more thorough risk management analysis, and provide the foundation for the risk assessment matrix. The application of appropriate hazard identification techniques was implemented to identify the potential risks associated with the status quo, identical FSRM, and privatization. Moreover, previous literature suggestions, along with risks found in the Estimation model, were reviewed to provide additional risk. The risks were listed and factors that may lead to other risks associated with the status quo, identical FSRM, and privatization were identified. Finally, the root causes were determined for each risk presented. After identifying all the root cause risks associated with each alternative, we move to the next step in the 5-Step Risk Management process.

After identification, the second step of assessing the hazards is implemented. This assessment step involved the application of quantitative and/or qualitative measures to determine the probability and severity of negative effects from exposure to the risks (AFI 90-802, 2013). The exposure, severity, and probability of the event occurring will be determined and categorized in risk levels labeled low, medium and high. The risk levels are applied and a complete risk assessment will be generated using a Risk Assessment Matrix as shown in Figure 6. Once the risks have been assessed, we move to step three in the 5-Step Risk Management process.

Step Three involves the development and selection of specific strategies and controls that reduce or eliminate the risk. In this step, the strategies to minimize the risks associated with Privatization are outlined, and the appropriate actions are determined to minimize the risk. This determination will be based on identifying control options, determining control effects, prioritizing risk controls, selecting the appropriate risk controls, and making an education risk control decision (AFI 90-802, 2013). Once all of these objectives have been met, the risk analysis will be complete.

Upon completion of the risk analysis model, a final conclusion is made based on the economic impact and risks involved with the status quo, identical FSRM and privatization alternatives. Although the risk assessment matrices will not be normalized into dollars based on risks that are unquantifiable, the risk assessment matrices will be used to ensure all risks are accounted for, and that the alternative with the lowest economic cost and risk was selected.

Armed with a thorough understanding of the estimation technique, and a detailed inventory of potential cost- and risk-analyzed solutions, the appropriate solution can be

chosen and implemented. The research presented here presents the recommended solution to provide guidance for implementation by senior career field leadership and sheds light into further studies. The next chapter walks through the model analysis, determines the lowest cost alternative between privatization and identical FSRM, and identifies and categorizes all known risk between the three alternatives.

IV. Analysis and Results

The previous chapters of this research have established the theoretical framework with respect to the cost and risk assessment models. This chapter provides the results of the analysis described in Chapter 3, which entails the status quo, privatization, and identical FSRM cost; comparative; and risk analyses. The outputs from individual bases are consolidated and utilized as inputs to create the Air Education and Training Command (AETC) cost estimation model. Additionally, exploratory comparative analysis is used to determine potential factors that could change the rank-order of unaccompanied housing alternatives. Finally, as discussed in Chapter 2 and outlined in Chapter 3, potential risks associated with the status quo; privatization; and identical Facility Sustainment, Restoration, and Modernization (FSRM) alternatives are analyzed and three separate risk analyses are provided utilizing the Air Force risk assessment matrix. The four part modeling process outlined in Chapter 3 provides the basis for this chapter.

4.1. Identified Problem

As discussed in Chapter 3, the identified problem originates from the Air Force's decision to take risks in infrastructure over the past three years (James & Welsh, 2016). The risk taken in infrastructure led to the Air Force underfunding past and current FSRM requirements (Johnson, 2015), and, as shown in Figure 7, projected Air Force funding continues to decline for Air Force FSRM as a percentage of plant replacement value.

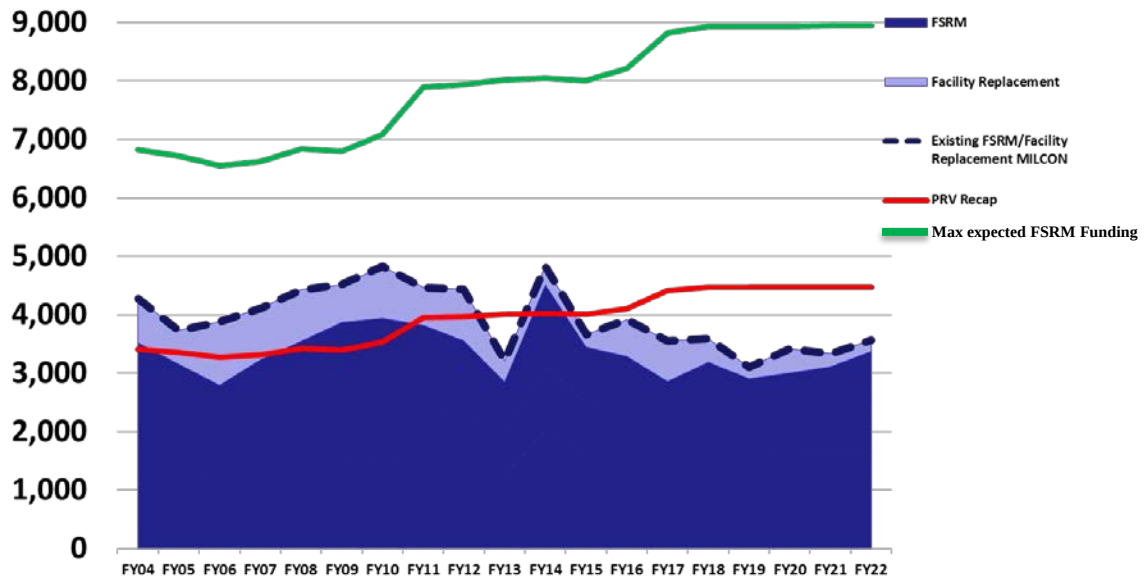


Figure 7: Air Force Projected FSRM Funding (AFCEC D&C Symposium, 2016)

This drives the Air Force’s need to determine other courses of action with regards to replacing final 16% of Air Force unaccompanied housing inventory. The estimated \$2.315B in plant replacement value coupled with the ongoing trend of taking risk in infrastructure dictates the need to analyze the status quo, privatization, and identical FSRM to determine which option between privatization and identical FSRM would be the least costly. The status quo is used as a comparison tool in the estimation model, as it has been determined that the status quo is an unacceptable option for our Airmen.

To ensure that the Air Force is making a strategic decision in future unaccompanied housing management, risk analysis based on the Air Force risk assessment matrix were constructed for the status quo, privatization, and identical FSRM options. The risk analysis identified the risks with each respective alternative, and provided a holistic view of the unaccompanied housing environment. With the combination of the cost estimation and

risk assessment models, Air Force leaders are able to make a more informed decision on whether we move forward with privatization or identical FSRM.

4.2. Cost Estimation Model

The cost estimation model is broken down into each respective AETC base, and is consolidated to form a complete cost estimate for the AETC major command (MAJCOM). Each individual base is broken down into the status quo, privatization, and identical FSRM alternative, and the outputs for each alternative at each respective base are inputs into the consolidated total estimate.

The status quo alternative contains the BAH, O&M, Utilities, Moves, and Manpower cost factors. The FSRM Renovation #1, Scoring, Project Management, and Out Year Renovation cost factors are not utilized in the status quo because no facilities are fully renovated, and scoring as well as project management are both cost factors strictly for privatization. In the status quo alternative of each respective base, BAH will be paid for 5% of the total occupancy. This 5% represents the average percentage of unoccupied Air Force unaccompanied housing (AFI 32-6005, 1998). O&M is calculated based on the average O&M costs over the previous eight years for each respective base except Fort Sam Houston, only the previous two years of O&M costs were available, and are adjusted based on the location, inflation and discount factors available in the DoD Area Cost Factors PAX Newsletter and OMB Circular A-94. Utilities are calculated using \$0.81 per square foot, which is based on the historical average utility cost for federal government dormitories (DOE, 2016). Moves in the status quo alternative are calculated using the average Air Force dormitory turnover of 35% (US HRMA Strategy, 2005) multiplied by the average cost to move an Airmen of \$6,727.00 (Olson, 2015). The moves costs are normalized

based on location, inflation and discount factors available in the DoD Area Cost Factors PAX Newsletter and OMB Circular A-94. Manpower costs are calculated based on multiplying the number of government personnel that support each bases unaccompanied military housing facilities by their pay and benefits consistent with OMB Circular A-76.

Privatization contains the cost factors BAH, Moves, Manpower, Scoring and Project Management. FSRM Renovation #1, O&M, Utilities, and Out Year Renovation will all happen under the privatization alternative; however, the Air Force pays BAH, which covers all of those cost factors in the privatization alternative. BAH in privatization is calculated by multiplying the total number of occupants by their BAH rate at each location. Moves in the privatization alternative are calculated using the average Air Force dormitory turnover of 35% (US HRMA Strategy, 2005) multiplied by the average cost to move an Airmen of \$6,727.00 (Olson, 2015). Additionally, the personnel that occupy the unaccompanied housing units that underwent FSRM Renovation #1 will be paid to move and added into the privatization move cost factor. The moves costs are normalized based on location, inflation and discount factors available in the DoD Area Cost Factors PAX Newsletter and OMB Circular A-94. In the privatization alternative, the only members that will be paid by the government for manpower are one GS-11/7, one GS-9/10, and one GS-9/8 per the OMB Circular A-76. The manpower costs are normalized based on location, inflation and discount factors available in the DoD Area Cost Factors PAX Newsletter and OMB Circular A-94. Scoring will be held to zero in this model to be as conservative as possible with the estimate. Although this is not always the case, the researcher determined that the most conservative estimate possible will be needed to ensure the best decision is made between the privatization and identical FSRM alternatives.

Project management costs included a one-time transition fee of \$65,000 per installation, annual Title II fees of \$300,000 per installation during the IDP, annual portfolio management fees of \$200,000 per installation during the IDP and annual portfolio management fees of \$175,000 per installation for every year following the conclusion of the IDP (AETC Group I, 2005).

Identical FSRM contains the cost factors of BAH, FSRM Renovation #1, O&M, Utilities, Moves, Manpower, and Out Year Renovation. Scoring and Project Management are both cost factors that are strictly privatization costs, and are not included in the identical FSRM alternative. BAH will be paid for 5% of the total occupancy in the identical FSRM alternative. This 5% represents the average percentage of unoccupied Air Force unaccompanied housing (AFI 32-6005, 1998). Within the identical FSRM alternative, BAH will also be paid to individuals who are moved for FSRM Renovation #1 and Out Year Renovation in each of the respective years of those renovations. FSRM Renovation #1 is the cost of new Air Force dormitory demolition (UFC 3-730-01, 2011) and construction per square foot (RS Means, 2016). O&M is calculated based on the average O&M costs over the previous eight years for each respective base except Fort Sam Houston, only the previous two years of O&M costs were available. Utilities are calculated using \$0.81 per square foot, which is based on the historical average utility cost for federal government dormitories (DOE, 2016). Moves in the identical FSRM alternative are calculated using the average Air Force dormitory turnover of 35% (US HRMA Strategy, 2005) multiplied by the average cost to move an Airmen of \$6,727.00 (Olson, 2015). Additionally, the personnel that occupy the unaccompanied housing units that underwent FSRM Renovation #1 and Out Year Renovation will be paid to move and added into the

identical FSRM move cost factor. Manpower costs are calculated based on multiplying the number of government personnel that support each bases unaccompanied military housing facilities by their pay and benefits consistent with OMB Circular A-76. Out Year Renovation will begin in year 31 based on the 30-year useful life for interior renovations for dormitories (RIT, 2014). All costs; BAH, FSRM Renovation #1, O&M, Utilities, Moves, Manpower, and Out Year Renovation; are normalized based on location, inflation and discount factors available in the DoD Area Cost Factors PAX Newsletter and OMB Circular A-94. The inputs from each base that are entered into the consolidated total estimate are summed together provide the final estimate.

4.2.1. Altus AFB Estimate

The Altus AFB cost data comes from all O&M costs from the years 2008-2015. Table 10 shows the O&M costs per year as well as the average over that period.

Altus Data	
Year	O&M Cost Data
2008	\$ 156,753.91
2009	\$ 263,413.75
2010	\$ 177,596.95
2011	\$ 576,064.02
2012	\$ 547,494.19
2013	\$ 3,510,474.01
2014	\$ 1,260,470.13
2015	\$ 216,026.93
Mean	\$ 838,536.74

Table 10: Altus AFB O&M Cost Data

Within the O&M cost data, the facility number and square footage for each facility associated with each O&M is provided and utilized to determine the costs for Altus AFB. Table 11 details the Altus AFB initial costs.

Base	Facility	SF	New Construction Cost	Demolition Cost	New Dorm Cost	Full Renovation Cost	PRSNL	BAH	Utilities
Altus	213	39667	\$ 7,589,883.78	\$ 1,150,343.00	\$ 8,740,226.78	\$ 6,118,158.75	112	\$ 856,807.20	\$ 32,130.27
	316	25467	\$ 4,872,855.78	\$ 738,543.00	\$ 5,611,398.78	\$ 3,927,979.15	72	\$ 550,087.20	\$ 20,628.27
	331	33750	\$ 6,457,725.00	\$ 978,750.00	\$ 7,436,475.00	\$ 5,205,532.50	95	\$ 729,000.00	\$ 27,337.50
	333	33750	\$ 6,457,725.00	\$ 978,750.00	\$ 7,436,475.00	\$ 5,205,532.50	95	\$ 729,000.00	\$ 27,337.50

Table 11: Altus AFB Initial Costs

The new construction costs were determined by multiplying the square footage of each facility by the union dormitory per square footage cost shown in Table 12 (RS Means, 2016).

Dormitory Cost/SF	
Non-Union	Union
\$ 176.07	\$ 191.34

Table 12: Dormitory Costs per Square Foot (RS Means, 2016)

The Union price used to calculate the new construction costs was used based on the aforementioned assumption that the estimate should be as conservative as possible to ensure the integrity of the cost estimation model. The demolition price was calculated by multiplying the square footage by the average Air Force demolition cost of \$29.00 per square foot (UFC 3-730-01, 2011). The new construction cost was added to the demolition cost to determine the complete cost to construct a new dormitory. Since no new construction will be occurring in any phase (status quo, privatization, or identical FSRM), the full renovation cost is calculated by multiplying the new dorm cost by 70%. The 70% is the estimated cost for full renovation used by all accompanied housing privatization estimates, which drives its use in this model (AETC Group I, 2005). With the number of personnel in each existing dormitory not available, the number of personnel is determined by dividing the actual square footage of each facility by 355 square foot per person to accommodate the Dorms-4-Airmen construct (AFUHDG, 2016). BAH is determined by

multiplying the number of personnel by the BAH rate for Altus AFB, which is \$639.00 per month or \$7,668.00 per year. Finally, the initial utilities costs are calculated by multiplying the facility square footage by the \$0.81 per square foot historical average for federal dormitories (DOE, 2016).

The initial Manpower calculation for Altus AFB is shown in Table 13.

Altus									
Grade Housing Office	Base Pay	Approx Benefits (32.85%)*	STATUS QUO		IDENTICAL FSRM		PRIVATIZATION		Military Grade Equivalent
			Positions	Funding	Positions	Funding	Positions	Funding	
GS-11/7	\$ 63,337.00	\$ 20,806.20	1	\$ 84,143.20	1	\$ 84,143.20	1	\$ 84,143.20	O-3
GS-9/10	\$ 56,706.00	\$ 18,627.92	1	\$ 75,333.92	1	\$ 75,333.92	1	\$ 75,333.92	O-2
GS-9/8	\$ 53,799.00	\$ 17,672.97	1	\$ 71,471.97	1	\$ 71,471.97	1	\$ 71,471.97	O-1
GS-7/10	\$ 46,362.00	\$ 15,229.92	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/9	\$ 45,173.00	\$ 14,839.33	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/5	\$ 40,418.00	\$ 13,277.31	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/4	\$ 39,229.00	\$ 12,886.73	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/3	\$ 38,040.00	\$ 12,496.14	1	\$ 50,536.14	1	\$ 50,536.14	0	\$ -	E-7
GS-5/8	\$ 35,512.00	\$ 11,665.69	0	\$ -	0	\$ -	0	\$ -	E-6
GS-4/4	\$ 28,305.00	\$ 9,298.19	3	\$ 112,809.58	3	\$ 112,809.58	0	\$ -	E-5
			7	\$ 394,294.81	7	\$ 394,294.81		\$ 230,949.10	

Table 13: Altus AFB Manpower Initial Costs

The number of personnel in the status quo and identical FSRM alternatives are based on the allotted personnel per number of individuals living in unaccompanied housing per installation. Altus AFB has 374 individuals occupying unaccompanied housing units, which earns one GS-11/7, one GS-9/10, one GS-9/8, one Air Force Master Sergeant and three Air Force Staff Sergeants (AFI 32-6005, 2013). In the privatization alternative, only Flight leadership will be retained to run the Asset Management Flight, which includes one GS-11/7, one GS-9/10, and one GS-9/8. The Altus AFB initial costs combined with the Altus AFB manpower initial cost calculations provide the basis for each calculation in the status quo, privatization, and identical FSRM alternative.

4.2.1.1. Altus AFB Status Quo

The Altus AFB status quo estimate included BAH, O&M, Utilities, Moves, and Manpower. The complete estimate for the status quo alternative is shown in Table 14, and totaled \$80,060,061.74.

Altus AFB Status Quo					
Year	BAH	O&M	Utilities	Moves	Manpower
1	\$ 140,615.11	\$ 770,297.41	\$ 98,690.70	\$ 863,513.92	\$ 356,014.92
2	\$ 138,033.77	\$ 759,133.68	\$ 97,260.40	\$ 847,661.98	\$ 349,407.15
3	\$ 135,699.86	\$ 748,131.74	\$ 95,850.83	\$ 833,329.53	\$ 343,431.78
4	\$ 133,765.98	\$ 737,289.26	\$ 94,461.69	\$ 821,453.58	\$ 338,467.78
5	\$ 131,956.58	\$ 726,603.90	\$ 93,092.68	\$ 810,342.13	\$ 333,575.53
6	\$ 130,171.66	\$ 716,073.41	\$ 91,743.51	\$ 799,380.98	\$ 328,753.99
7	\$ 128,410.88	\$ 705,695.54	\$ 90,413.89	\$ 788,568.09	\$ 324,002.15
8	\$ 126,673.93	\$ 695,468.07	\$ 89,103.55	\$ 777,901.47	\$ 319,318.99
9	\$ 124,960.46	\$ 685,388.82	\$ 87,812.19	\$ 767,379.13	\$ 314,703.52
10	\$ 123,270.18	\$ 675,455.65	\$ 86,539.55	\$ 756,999.13	\$ 310,154.76
11	\$ 121,602.75	\$ 665,666.43	\$ 85,285.35	\$ 746,759.52	\$ 305,671.75
12	\$ 119,957.88	\$ 656,019.09	\$ 84,049.33	\$ 736,658.43	\$ 301,253.54
13	\$ 118,335.27	\$ 646,511.57	\$ 82,831.23	\$ 726,693.97	\$ 296,899.19
14	\$ 116,734.60	\$ 637,141.84	\$ 81,630.77	\$ 716,864.29	\$ 292,607.77
15	\$ 115,155.58	\$ 627,907.90	\$ 80,447.72	\$ 707,167.58	\$ 288,378.39
16	\$ 113,597.92	\$ 618,807.78	\$ 79,281.81	\$ 697,602.02	\$ 284,210.14
17	\$ 112,061.33	\$ 609,839.56	\$ 78,132.80	\$ 688,165.86	\$ 280,102.13
18	\$ 110,545.52	\$ 601,001.30	\$ 77,000.44	\$ 678,857.34	\$ 276,053.51
19	\$ 109,050.22	\$ 592,291.14	\$ 75,884.49	\$ 669,674.73	\$ 272,063.40
20	\$ 107,575.14	\$ 583,707.21	\$ 74,784.72	\$ 660,616.32	\$ 268,130.97
21	\$ 106,120.02	\$ 575,247.68	\$ 73,700.88	\$ 651,680.45	\$ 264,255.37
22	\$ 104,684.58	\$ 566,910.76	\$ 72,632.75	\$ 642,865.45	\$ 260,435.80
23	\$ 103,268.56	\$ 558,694.66	\$ 71,580.10	\$ 634,169.69	\$ 256,671.43
24	\$ 101,871.69	\$ 550,597.64	\$ 70,542.71	\$ 625,591.54	\$ 252,961.48
25	\$ 100,493.71	\$ 542,617.96	\$ 69,520.35	\$ 617,129.44	\$ 249,305.14
26	\$ 99,134.38	\$ 534,753.93	\$ 68,512.81	\$ 608,781.79	\$ 245,701.66
27	\$ 97,793.43	\$ 527,003.88	\$ 67,519.87	\$ 600,547.06	\$ 242,150.26
28	\$ 96,470.62	\$ 519,366.14	\$ 66,541.32	\$ 592,423.72	\$ 238,650.20
29	\$ 95,165.70	\$ 511,839.09	\$ 65,576.95	\$ 584,410.26	\$ 235,200.72
30	\$ 93,878.44	\$ 504,421.14	\$ 64,626.56	\$ 576,505.19	\$ 231,801.11
31	\$ 92,608.59	\$ 497,110.68	\$ 63,689.95	\$ 568,707.06	\$ 228,450.63
32	\$ 91,355.91	\$ 489,906.18	\$ 62,766.90	\$ 561,014.40	\$ 225,148.58
33	\$ 90,120.18	\$ 482,806.09	\$ 61,857.24	\$ 553,425.80	\$ 221,894.26
34	\$ 88,901.16	\$ 475,808.90	\$ 60,960.76	\$ 545,939.85	\$ 218,686.97
35	\$ 87,698.63	\$ 468,913.12	\$ 60,077.27	\$ 538,555.15	\$ 215,526.05
36	\$ 86,512.37	\$ 462,117.28	\$ 59,206.58	\$ 531,270.35	\$ 212,410.81
37	\$ 85,342.16	\$ 455,419.93	\$ 58,348.52	\$ 524,084.08	\$ 209,340.60
38	\$ 84,187.77	\$ 448,819.64	\$ 57,502.89	\$ 516,995.02	\$ 206,314.77
39	\$ 83,049.00	\$ 442,315.01	\$ 56,669.51	\$ 510,001.85	\$ 203,332.68
40	\$ 81,925.63	\$ 435,904.64	\$ 55,848.21	\$ 503,103.28	\$ 200,393.69
41	\$ 80,817.46	\$ 429,587.19	\$ 55,038.82	\$ 496,298.02	\$ 197,497.17
42	\$ 79,724.27	\$ 423,361.28	\$ 54,241.16	\$ 489,584.81	\$ 194,642.53
43	\$ 78,645.88	\$ 417,225.61	\$ 53,455.05	\$ 482,962.40	\$ 191,829.14
44	\$ 77,582.07	\$ 411,178.87	\$ 52,680.34	\$ 476,429.58	\$ 189,056.43
45	\$ 76,532.65	\$ 405,219.75	\$ 51,916.86	\$ 469,985.12	\$ 186,323.78
46	\$ 75,497.42	\$ 399,347.00	\$ 51,164.44	\$ 463,627.83	\$ 183,630.64
47	\$ 74,476.20	\$ 393,559.36	\$ 50,422.93	\$ 457,356.54	\$ 180,976.42
48	\$ 73,468.80	\$ 387,855.60	\$ 49,692.16	\$ 451,170.07	\$ 178,360.57
49	\$ 72,475.02	\$ 382,234.51	\$ 48,971.98	\$ 445,067.29	\$ 175,782.53
50	\$ 71,494.68	\$ 376,694.88	\$ 48,262.24	\$ 439,047.06	\$ 173,241.75
Total =	\$ 5,089,471.57	\$ 27,535,269.72	\$ 3,527,825.76	\$ 31,254,320.15	\$ 12,653,174.53
		Altus Total NPV =	\$ 80,060,061.74		

Table 14: Altus AFB Status Quo Estimate

The Net Present Value (NPV) was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.92 for Altus AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.1.2. Altus AFB Privatization

The Altus AFB privatization estimate included BAH, Moves, Manpower, and Project Management. The complete estimate for the privatization alternative is shown in Table 15, and totaled \$147,641,648.89.

Altus AFB Privatization			
BAH	Moves	Manpower	Proj Mgt
\$ 2,811,693.17	\$ 2,075,099.75	\$ 208,527.53	\$ 510,147.29
\$ 2,759,507.06	\$ 2,080,209.19	\$ 204,657.18	\$ 443,078.55
\$ 2,712,315.49	\$ 833,329.53	\$ 201,157.25	\$ 152,425.44
\$ 2,673,111.39	\$ 821,453.58	\$ 198,249.70	\$ 150,222.27
\$ 2,634,473.96	\$ 810,342.13	\$ 195,384.18	\$ 148,050.94
\$ 2,596,394.99	\$ 799,380.98	\$ 192,560.07	\$ 145,911.00
\$ 2,558,866.42	\$ 788,568.09	\$ 189,776.79	\$ 143,801.98
\$ 2,521,880.30	\$ 777,901.47	\$ 187,033.73	\$ 141,723.45
\$ 2,485,428.77	\$ 767,379.13	\$ 184,330.33	\$ 139,674.97
\$ 2,449,504.12	\$ 756,999.13	\$ 181,666.00	\$ 137,656.09
\$ 2,414,098.72	\$ 746,759.52	\$ 179,040.18	\$ 135,666.39
\$ 2,379,205.09	\$ 736,658.43	\$ 176,452.31	\$ 133,705.46
\$ 2,344,815.80	\$ 726,693.97	\$ 173,901.85	\$ 131,772.87
\$ 2,310,923.59	\$ 716,864.29	\$ 171,388.26	\$ 129,868.21
\$ 2,277,521.25	\$ 707,167.58	\$ 168,910.99	\$ 127,991.08
\$ 2,244,601.72	\$ 697,602.02	\$ 166,469.54	\$ 126,141.08
\$ 2,212,158.00	\$ 688,165.86	\$ 164,063.37	\$ 124,317.82
\$ 2,180,183.24	\$ 678,857.34	\$ 161,691.98	\$ 122,520.92
\$ 2,148,670.64	\$ 669,674.73	\$ 159,354.86	\$ 120,749.99
\$ 2,117,613.52	\$ 660,616.32	\$ 157,051.53	\$ 119,004.66
\$ 2,087,005.31	\$ 651,680.45	\$ 154,781.49	\$ 117,284.55
\$ 2,056,839.52	\$ 642,865.45	\$ 152,544.27	\$ 115,589.31
\$ 2,027,109.74	\$ 634,169.69	\$ 150,339.37	\$ 113,918.57
\$ 1,997,809.68	\$ 625,591.54	\$ 148,166.35	\$ 112,271.98
\$ 1,968,933.13	\$ 617,129.44	\$ 146,024.74	\$ 110,649.19
\$ 1,940,473.96	\$ 608,781.79	\$ 143,914.08	\$ 109,049.85
\$ 1,912,426.14	\$ 600,547.06	\$ 141,833.93	\$ 107,473.63
\$ 1,884,783.73	\$ 592,423.72	\$ 139,783.85	\$ 105,920.20
\$ 1,857,540.87	\$ 584,410.26	\$ 137,763.40	\$ 104,389.22
\$ 1,830,691.77	\$ 576,505.19	\$ 135,772.15	\$ 102,880.36
\$ 1,804,230.76	\$ 568,707.06	\$ 133,809.69	\$ 275,210.44
\$ 1,778,152.22	\$ 561,014.40	\$ 131,875.59	\$ 271,232.52
\$ 1,752,450.61	\$ 553,425.80	\$ 129,969.45	\$ 98,483.40
\$ 1,727,120.51	\$ 545,939.85	\$ 128,090.85	\$ 97,059.91
\$ 1,702,156.52	\$ 538,555.15	\$ 126,239.41	\$ 95,657.00
\$ 1,677,553.37	\$ 531,270.35	\$ 124,414.74	\$ 94,274.36
\$ 1,653,305.84	\$ 524,084.08	\$ 122,616.43	\$ 92,911.71
\$ 1,629,408.78	\$ 516,995.02	\$ 120,844.12	\$ 91,568.76
\$ 1,605,857.13	\$ 510,001.85	\$ 119,097.43	\$ 90,245.21
\$ 1,582,645.90	\$ 503,103.28	\$ 117,375.98	\$ 88,940.80
\$ 1,559,770.17	\$ 496,298.02	\$ 115,679.42	\$ 87,655.24
\$ 1,537,225.09	\$ 489,584.81	\$ 114,007.37	\$ 86,388.26
\$ 1,515,005.87	\$ 482,962.40	\$ 112,359.50	\$ 85,139.59
\$ 1,493,107.82	\$ 476,429.58	\$ 110,735.44	\$ 83,908.98
\$ 1,471,526.28	\$ 469,985.12	\$ 109,134.86	\$ 82,696.15
\$ 1,450,256.68	\$ 463,627.83	\$ 107,557.41	\$ 81,500.85
\$ 1,429,294.52	\$ 457,356.54	\$ 106,002.77	\$ 80,322.83
\$ 1,408,635.34	\$ 451,170.07	\$ 104,470.59	\$ 79,161.83
\$ 1,388,274.78	\$ 445,067.29	\$ 102,960.56	\$ 78,017.62
\$ 1,368,208.50	\$ 439,047.06	\$ 101,472.36	\$ 76,889.94
\$ 99,930,767.75	\$ 33,698,453.19	\$ 7,411,305.26	\$ 6,601,122.69
	Altus Total NPV =	\$ 147,641,648.89	

Table 15: Altus AFB Privatization Estimate

As previously discussed, Scoring is assumed to be zero in the cost estimate model to create the most conservative estimate possible. The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.92 for Altus AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.1.3. Altus AFB Identical FSRM

The Altus AFB identical FSRM estimate included BAH, FSRM Renovation #1, O&M, Utilities, Moves, Manpower, and Out Year Renovation. The complete estimate for the identical FSRM alternative is shown in Table 16, and totaled \$94,566,013.89.

Altus AFB Identical FSRM						
BAH	FSRM Reno 1	O&M	Utilities	Moves	Manpower	Out Year Reno
\$ 1,521,682.46	\$ 1,530,622.16	\$ 770,297.41	\$ 98,690.70	\$ 2,075,099.75	\$ 356,014.92	
\$ 1,542,994.67	\$ 1,563,233.46	\$ 759,133.68	\$ 97,260.40	\$ 2,080,209.19	\$ 349,407.15	
\$ 135,615.77		\$ 748,131.74	\$ 95,850.83	\$ 833,329.53	\$ 343,431.78	
\$ 133,655.57		\$ 737,289.26	\$ 94,461.69	\$ 821,453.58	\$ 338,467.78	
\$ 131,723.70		\$ 726,603.90	\$ 93,092.68	\$ 810,342.13	\$ 333,575.53	
\$ 129,819.75		\$ 716,073.41	\$ 91,743.51	\$ 799,380.98	\$ 328,753.99	
\$ 127,943.32		\$ 705,695.54	\$ 90,413.89	\$ 788,568.09	\$ 324,002.15	
\$ 126,094.01		\$ 695,468.07	\$ 89,103.55	\$ 777,901.47	\$ 319,318.99	
\$ 124,271.44		\$ 685,388.82	\$ 87,812.19	\$ 767,379.13	\$ 314,703.52	
\$ 122,475.21		\$ 675,455.65	\$ 86,539.55	\$ 756,999.13	\$ 310,154.76	
\$ 120,704.94		\$ 665,666.43	\$ 85,285.35	\$ 746,759.52	\$ 305,671.75	
\$ 118,960.25		\$ 656,019.09	\$ 84,049.33	\$ 736,658.43	\$ 301,253.54	
\$ 117,240.79		\$ 646,511.57	\$ 82,831.23	\$ 726,693.97	\$ 296,899.19	
\$ 115,546.18		\$ 637,141.84	\$ 81,630.77	\$ 716,864.29	\$ 292,607.77	
\$ 113,876.06		\$ 627,907.90	\$ 80,447.72	\$ 707,167.58	\$ 288,378.39	
\$ 112,230.09		\$ 618,807.78	\$ 79,281.81	\$ 697,602.02	\$ 284,210.14	
\$ 110,607.90		\$ 609,839.56	\$ 78,132.80	\$ 688,165.86	\$ 280,102.13	
\$ 109,009.16		\$ 601,001.30	\$ 77,000.44	\$ 678,857.34	\$ 276,053.51	
\$ 107,433.53		\$ 592,291.14	\$ 75,884.49	\$ 669,674.73	\$ 272,063.40	
\$ 105,880.68		\$ 583,707.21	\$ 74,784.72	\$ 660,616.32	\$ 268,130.97	
\$ 104,350.27		\$ 575,247.68	\$ 73,700.88	\$ 651,680.45	\$ 264,255.37	
\$ 102,841.98		\$ 566,910.76	\$ 72,632.75	\$ 642,865.45	\$ 260,435.80	
\$ 101,355.49		\$ 558,694.66	\$ 71,580.10	\$ 634,169.69	\$ 256,671.43	
\$ 99,890.48		\$ 550,597.64	\$ 70,542.71	\$ 625,591.54	\$ 252,961.48	
\$ 98,446.66		\$ 542,617.96	\$ 69,520.35	\$ 617,129.44	\$ 249,305.14	
\$ 97,023.70		\$ 534,753.93	\$ 68,512.81	\$ 608,781.79	\$ 245,701.66	
\$ 95,621.31		\$ 527,003.88	\$ 67,519.87	\$ 600,547.06	\$ 242,150.26	
\$ 94,239.19		\$ 519,366.14	\$ 66,541.32	\$ 592,423.72	\$ 238,650.20	
\$ 92,877.04		\$ 511,839.09	\$ 65,576.95	\$ 584,410.26	\$ 235,200.72	
\$ 91,534.59		\$ 504,421.14	\$ 64,626.56	\$ 576,505.19	\$ 231,801.11	
\$ 90,211.54		\$ 497,110.68	\$ 63,689.95	\$ 1,366,652.97	\$ 228,450.63	\$ 987,785.52
\$ 88,907.61		\$ 489,906.18	\$ 62,766.90	\$ 1,376,760.24	\$ 225,148.58	\$ 1,008,831.19
\$ 87,622.53		\$ 482,806.09	\$ 61,857.24	\$ 553,425.80	\$ 221,894.26	
\$ 86,356.03		\$ 475,808.90	\$ 60,960.76	\$ 545,939.85	\$ 218,686.97	
\$ 85,107.83		\$ 468,913.12	\$ 60,077.27	\$ 538,555.15	\$ 215,526.05	
\$ 1,410,957.80		\$ 462,117.28	\$ 59,206.58	\$ 531,270.35	\$ 212,410.81	
\$ 1,420,056.26		\$ 455,419.93	\$ 58,348.52	\$ 524,084.08	\$ 209,340.60	
\$ 81,470.44		\$ 448,819.64	\$ 57,502.89	\$ 516,995.02	\$ 206,314.77	
\$ 80,292.86		\$ 442,315.01	\$ 56,669.51	\$ 510,001.85	\$ 203,332.68	
\$ 79,132.30		\$ 435,904.64	\$ 55,848.21	\$ 503,103.28	\$ 200,393.69	
\$ 77,988.51		\$ 429,587.19	\$ 55,038.82	\$ 496,298.02	\$ 197,497.17	
\$ 76,861.25		\$ 423,361.28	\$ 54,241.16	\$ 489,584.81	\$ 194,642.53	
\$ 75,750.29		\$ 417,225.61	\$ 53,455.05	\$ 482,962.40	\$ 191,829.14	
\$ 74,655.39		\$ 411,178.87	\$ 52,680.34	\$ 476,429.58	\$ 189,056.43	
\$ 73,576.31		\$ 405,219.75	\$ 51,916.86	\$ 469,985.12	\$ 186,323.78	
\$ 72,512.83		\$ 399,347.00	\$ 51,164.44	\$ 463,627.83	\$ 183,630.64	
\$ 71,464.73		\$ 393,559.36	\$ 50,422.93	\$ 457,356.54	\$ 180,976.42	
\$ 70,431.77		\$ 387,855.60	\$ 49,692.16	\$ 451,170.07	\$ 178,360.57	
\$ 69,413.74		\$ 382,234.51	\$ 48,971.98	\$ 445,067.29	\$ 175,782.53	
\$ 68,410.43		\$ 376,694.88	\$ 48,262.24	\$ 439,047.06	\$ 173,241.75	
\$ 10,447,126.61	\$ 3,093,855.61	\$ 27,535,269.72	\$ 3,527,825.76	\$ 35,312,144.94	\$ 12,653,174.53	\$ 1,996,616.71
		Altus Total NPV =	\$ 94,566,013.89			

Table 16: Altus AFB Identical FSRM Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.92 for Altus AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.2. Columbus AFB Estimate

The Columbus AFB cost data comes from all O&M costs from the years 2008-2015. Table 17 shows the O&M costs per year as well as the average over that period.

Columbus Data	
Year	O&M Cost Data
2008	\$ 114,714.64
2009	\$ 99,060.95
2010	\$ 147,773.82
2011	\$ 89,032.47
2012	\$ 68,252.05
2013	\$ 143,981.76
2014	\$ 243,611.62
2015	\$ 132,701.33
Mean	\$ 129,891.08

Table 17: Columbus AFB O&M Cost Data

Within the O&M cost data, the facility number and square footage for each facility associated with each O&M is provided and utilized to determine the costs for Columbus AFB. Table 18 details the Columbus AFB initial costs.

Base	Facility	SF	New Construction Cost	Demolition Cost	New Dorm Cost	Full Renovation Cost	PRSNL	BAH	Utilities
Columbus	550	18740	\$ 3,585,711.60	\$ 543,460.00	\$ 4,129,171.60	\$ 2,890,420.12	53	\$ 412,385.58	\$ 15,179.40
	555	16724	\$ 3,199,970.16	\$ 484,996.00	\$ 3,684,966.16	\$ 2,579,476.31	47	\$ 368,022.22	\$ 13,546.44
	956	23013	\$ 4,403,307.42	\$ 667,377.00	\$ 5,070,684.42	\$ 3,549,479.09	65	\$ 506,415.65	\$ 18,640.53

Table 18: Columbus AFB Initial Costs

The new construction costs were determined by multiplying the square footage of each facility by the union dormitory per square footage cost of \$191.34 shown in Table 12 (RS

Means, 2016). The Union price used to calculate the new construction costs was used based on the aforementioned assumption that the estimate should be as conservative as possible to ensure the integrity of the cost estimation model. The demolition price was calculated by multiplying the square footage by the average Air Force demolition cost of \$29.00 per square foot (UFC 3-730-01, 2011). The new construction cost was added to the demolition cost to determine the complete cost to construct a new dormitory. Since no new construction will be occurring in any phase (status quo, privatization, or identical FSRM), the full renovation cost is calculated by multiplying the new dorm cost by 70%. The 70% is the estimated cost for full renovation used by all accompanied housing privatization estimates, which drives its use in this model (AETC Group I, 2005). With the number of personnel in each existing dormitory not available, the number of personnel is determined by dividing the actual square footage of each facility by 355 square foot per person to accommodate the Dorms-4-Airmen construct (AFUHDG, 2016). BAH is determined by multiplying the number of personnel by the BAH rate for Columbus AFB, which is \$651.00 per month or \$7,812.00 per year. Finally, the initial utilities costs are calculated by multiplying the facility square footage by the \$0.81 per square foot historical average for federal dormitories (DOE, 2016).

The initial Manpower calculation for Columbus AFB is shown in Table 19.

Columbus									
Grade Housing Office	Base Pay	Approx Benefits (32.85%)*	STATUS QUO		IDENTICAL FSRM		PRIVATIZATION		Military Grade Equivalent
			Positions	Funding	Positions	Funding	Positions	Funding	
GS-11/7	\$ 63,337.00	\$ 20,806.20	1	\$ 84,143.20	1	\$ 84,143.20	1	\$ 84,143.20	O-3
GS-9/10	\$ 56,706.00	\$ 18,627.92	1	\$ 75,333.92	1	\$ 75,333.92	1	\$ 75,333.92	O-2
GS-9/8	\$ 53,799.00	\$ 17,672.97	1	\$ 71,471.97	1	\$ 71,471.97	1	\$ 71,471.97	O-1
GS-7/10	\$ 46,362.00	\$ 15,229.92	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/9	\$ 45,173.00	\$ 14,839.33	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/5	\$ 40,418.00	\$ 13,277.31	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/4	\$ 39,229.00	\$ 12,886.73	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/3	\$ 38,040.00	\$ 12,496.14	1	\$ 50,536.14	1	\$ 50,536.14	0	\$ -	E-7
GS-5/8	\$ 35,512.00	\$ 11,665.69	0	\$ -	0	\$ -	0	\$ -	E-6
GS-4/4	\$ 28,305.00	\$ 9,298.19	1	\$ 37,603.19	1	\$ 37,603.19	0	\$ -	E-5
			5	\$ 319,088.43	5	\$ 319,088.43		\$ 230,949.10	

Table 19: Columbus AFB Manpower Initial Costs

The number of personnel in the status quo and identical FSRM alternatives are based on the allotted personnel per number of individuals living in unaccompanied housing per installation. Columbus AFB has 165 individuals occupying unaccompanied housing units, which earns one GS-11/7, one GS-9/10, one GS-9/8, one Air Force Master Sergeant and one Air Force Staff Sergeant (AFI 32-6005, 2013). In the privatization alternative, only Flight leadership will be retained to run the Asset Management Flight, which includes one GS-11/7, one GS-9/10, and one GS-9/8. The Columbus AFB initial costs combined with the Columbus AFB manpower initial cost calculations provide the basis for each calculation in the status quo, privatization, and identical FSRM alternative.

4.2.2.1. Columbus AFB Status Quo

The Columbus AFB status quo estimate included BAH, O&M, Utilities, Moves, and Manpower. The complete estimate for the status quo alternative is shown in Table 20, and totaled \$30,205,892.66.

Columbus AFB Status Quo					
Year	BAH	O&M	Utilities	Moves	Manpower
1	\$ 63,160.03	\$ 105,054.07	\$ 38,309.25	\$ 380,714.63	\$ 253,661.98
2	\$ 62,000.57	\$ 103,531.54	\$ 37,754.04	\$ 373,725.66	\$ 248,953.92
3	\$ 60,952.25	\$ 102,031.09	\$ 37,206.88	\$ 367,406.63	\$ 244,696.45
4	\$ 60,083.61	\$ 100,552.37	\$ 36,667.65	\$ 362,170.64	\$ 241,159.58
5	\$ 59,270.88	\$ 99,095.09	\$ 36,136.24	\$ 357,271.71	\$ 237,673.83
6	\$ 58,469.15	\$ 97,658.93	\$ 35,612.52	\$ 352,439.05	\$ 234,238.47
7	\$ 57,678.26	\$ 96,243.59	\$ 35,096.40	\$ 347,671.76	\$ 230,852.76
8	\$ 56,898.08	\$ 94,848.75	\$ 34,587.76	\$ 342,968.96	\$ 227,515.99
9	\$ 56,128.44	\$ 93,474.13	\$ 34,086.48	\$ 338,329.76	\$ 224,227.45
10	\$ 55,369.21	\$ 92,119.43	\$ 33,592.48	\$ 333,753.32	\$ 220,986.44
11	\$ 54,620.26	\$ 90,784.37	\$ 33,105.63	\$ 329,238.78	\$ 217,792.28
12	\$ 53,881.43	\$ 89,468.65	\$ 32,625.84	\$ 324,785.31	\$ 214,644.29
13	\$ 53,152.60	\$ 88,172.01	\$ 32,153.00	\$ 320,392.08	\$ 211,541.80
14	\$ 52,433.63	\$ 86,894.15	\$ 31,687.01	\$ 316,058.27	\$ 208,484.15
15	\$ 51,724.38	\$ 85,634.82	\$ 31,227.78	\$ 311,783.09	\$ 205,470.70
16	\$ 51,024.73	\$ 84,393.73	\$ 30,775.21	\$ 307,565.73	\$ 202,500.80
17	\$ 50,334.54	\$ 83,170.63	\$ 30,329.19	\$ 303,405.42	\$ 199,573.83
18	\$ 49,653.69	\$ 81,965.26	\$ 29,889.64	\$ 299,301.39	\$ 196,689.17
19	\$ 48,982.04	\$ 80,777.36	\$ 29,456.45	\$ 295,252.87	\$ 193,846.21
20	\$ 48,319.48	\$ 79,606.67	\$ 29,029.55	\$ 291,259.11	\$ 191,044.33
21	\$ 47,665.89	\$ 78,452.95	\$ 28,608.83	\$ 287,319.37	\$ 188,282.96
22	\$ 47,021.13	\$ 77,315.96	\$ 28,194.21	\$ 283,432.93	\$ 185,561.50
23	\$ 46,385.10	\$ 76,195.43	\$ 27,785.60	\$ 279,599.05	\$ 182,879.37
24	\$ 45,757.66	\$ 75,091.15	\$ 27,382.91	\$ 275,817.04	\$ 180,236.01
25	\$ 45,138.72	\$ 74,002.87	\$ 26,986.05	\$ 272,086.18	\$ 177,630.86
26	\$ 44,528.15	\$ 72,930.37	\$ 26,594.95	\$ 268,405.78	\$ 175,063.37
27	\$ 43,925.84	\$ 71,873.41	\$ 26,209.52	\$ 264,775.18	\$ 172,532.98
28	\$ 43,331.67	\$ 70,831.76	\$ 25,829.67	\$ 261,193.68	\$ 170,039.17
29	\$ 42,745.54	\$ 69,805.22	\$ 25,455.33	\$ 257,660.62	\$ 167,581.41
30	\$ 42,167.34	\$ 68,793.55	\$ 25,086.41	\$ 254,175.36	\$ 165,159.17
31	\$ 41,596.96	\$ 67,796.54	\$ 24,722.84	\$ 250,737.24	\$ 162,771.94
32	\$ 41,034.30	\$ 66,813.98	\$ 24,364.53	\$ 247,345.62	\$ 160,419.22
33	\$ 40,479.24	\$ 65,845.66	\$ 24,011.43	\$ 243,999.88	\$ 158,100.50
34	\$ 39,931.70	\$ 64,891.38	\$ 23,663.43	\$ 240,699.40	\$ 155,815.30
35	\$ 39,391.56	\$ 63,950.92	\$ 23,320.49	\$ 237,443.56	\$ 153,563.13
36	\$ 38,858.73	\$ 63,024.10	\$ 22,982.51	\$ 234,231.77	\$ 151,343.51
37	\$ 38,333.10	\$ 62,110.70	\$ 22,649.43	\$ 231,063.41	\$ 149,155.98
38	\$ 37,814.59	\$ 61,210.55	\$ 22,321.18	\$ 227,937.92	\$ 147,000.06
39	\$ 37,303.08	\$ 60,323.44	\$ 21,997.68	\$ 224,854.70	\$ 144,875.30
40	\$ 36,798.50	\$ 59,449.19	\$ 21,678.87	\$ 221,813.19	\$ 142,781.26
41	\$ 36,300.74	\$ 58,587.60	\$ 21,364.69	\$ 218,812.82	\$ 140,717.49
42	\$ 35,809.72	\$ 57,738.51	\$ 21,055.05	\$ 215,853.03	\$ 138,683.54
43	\$ 35,325.34	\$ 56,901.72	\$ 20,749.91	\$ 212,933.28	\$ 136,678.99
44	\$ 34,847.51	\$ 56,077.06	\$ 20,449.18	\$ 210,053.02	\$ 134,703.42
45	\$ 34,376.14	\$ 55,264.35	\$ 20,152.82	\$ 207,211.72	\$ 132,756.40
46	\$ 33,911.15	\$ 54,463.41	\$ 19,860.75	\$ 204,408.86	\$ 130,837.53
47	\$ 33,452.45	\$ 53,674.09	\$ 19,572.91	\$ 201,643.91	\$ 128,946.39
48	\$ 32,999.95	\$ 52,896.20	\$ 19,289.25	\$ 198,916.36	\$ 127,082.58
49	\$ 32,553.57	\$ 52,129.59	\$ 19,009.69	\$ 196,225.70	\$ 125,245.72
50	\$ 32,113.23	\$ 51,374.09	\$ 18,734.19	\$ 193,571.44	\$ 123,435.40
Total =	\$ 2,286,035.87	\$ 3,755,292.42	\$ 1,369,413.28	\$ 13,779,716.21	\$ 9,015,434.88
		Columbus Total NPV =	\$ 30,205,892.66		

Table 20: Columbus AFB Status Quo Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.81 for Columbus AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.2.2. Columbus AFB Privatization

The Columbus AFB privatization estimate included BAH, Moves, Manpower, and Project Management. The complete estimate for the privatization alternative is shown in Table 21, and totaled \$72,082,505.01.

Columbus AFB Privatization			
BAH	Moves	Manpower	Proj Mgt
\$ 1,262,927.07	\$ 1,040,395.89	\$ 183,594.89	\$ 449,151.42
\$ 1,239,486.66	\$ 793,942.09	\$ 180,187.30	\$ 390,101.76
\$ 1,218,289.64	\$ 367,406.63	\$ 177,105.84	\$ 134,200.66
\$ 1,200,680.35	\$ 362,170.64	\$ 174,545.93	\$ 132,260.91
\$ 1,183,325.59	\$ 357,271.71	\$ 172,023.02	\$ 130,349.20
\$ 1,166,221.68	\$ 352,439.05	\$ 169,536.59	\$ 128,465.12
\$ 1,149,364.99	\$ 347,671.76	\$ 167,086.09	\$ 126,608.27
\$ 1,132,751.94	\$ 342,968.96	\$ 164,671.01	\$ 124,778.26
\$ 1,116,379.03	\$ 338,329.76	\$ 162,290.83	\$ 122,974.70
\$ 1,100,242.76	\$ 333,753.32	\$ 159,945.06	\$ 121,197.21
\$ 1,084,339.74	\$ 329,238.78	\$ 157,633.20	\$ 119,445.41
\$ 1,068,666.58	\$ 324,785.31	\$ 155,354.75	\$ 117,718.94
\$ 1,053,219.96	\$ 320,392.08	\$ 153,109.24	\$ 116,017.41
\$ 1,037,996.60	\$ 316,058.27	\$ 150,896.18	\$ 114,340.49
\$ 1,022,993.29	\$ 311,783.09	\$ 148,715.11	\$ 112,687.80
\$ 1,008,206.84	\$ 307,565.73	\$ 146,565.57	\$ 111,059.00
\$ 993,634.11	\$ 303,405.42	\$ 144,447.10	\$ 109,453.74
\$ 979,272.01	\$ 299,301.39	\$ 142,359.24	\$ 107,871.68
\$ 965,117.51	\$ 295,252.87	\$ 140,301.57	\$ 106,312.49
\$ 951,167.60	\$ 291,259.11	\$ 138,273.63	\$ 104,775.84
\$ 937,419.32	\$ 287,319.37	\$ 136,275.01	\$ 103,261.40
\$ 923,869.77	\$ 283,432.93	\$ 134,305.28	\$ 101,768.85
\$ 910,516.05	\$ 279,599.05	\$ 132,364.01	\$ 100,297.87
\$ 897,355.36	\$ 275,817.04	\$ 130,450.81	\$ 98,848.15
\$ 884,384.89	\$ 272,086.18	\$ 128,565.26	\$ 97,419.39
\$ 871,601.90	\$ 268,405.78	\$ 126,706.96	\$ 96,011.28
\$ 859,003.67	\$ 264,775.18	\$ 124,875.53	\$ 94,623.52
\$ 846,587.54	\$ 261,193.68	\$ 123,070.56	\$ 93,255.83
\$ 834,350.87	\$ 257,660.62	\$ 121,291.69	\$ 91,907.90
\$ 822,291.08	\$ 254,175.36	\$ 119,538.53	\$ 90,579.45
\$ 810,405.59	\$ 250,737.24	\$ 117,810.70	\$ 242,304.84
\$ 798,691.90	\$ 247,345.62	\$ 116,107.86	\$ 238,802.54
\$ 787,147.53	\$ 243,999.88	\$ 114,429.62	\$ 86,708.21
\$ 775,770.01	\$ 240,699.40	\$ 112,775.64	\$ 85,454.92
\$ 764,556.95	\$ 237,443.56	\$ 111,145.57	\$ 84,219.75
\$ 753,505.96	\$ 234,231.77	\$ 109,539.06	\$ 83,002.43
\$ 742,614.71	\$ 231,063.41	\$ 107,955.77	\$ 81,802.70
\$ 731,880.88	\$ 227,937.92	\$ 106,395.37	\$ 80,620.32
\$ 721,302.19	\$ 224,854.70	\$ 104,857.52	\$ 79,455.02
\$ 710,876.41	\$ 221,813.19	\$ 103,341.90	\$ 78,306.57
\$ 700,601.33	\$ 218,812.82	\$ 101,848.18	\$ 77,174.72
\$ 690,474.76	\$ 215,853.03	\$ 100,376.06	\$ 76,059.23
\$ 680,494.57	\$ 212,933.28	\$ 98,925.21	\$ 74,959.86
\$ 670,658.63	\$ 210,053.02	\$ 97,495.34	\$ 73,876.38
\$ 660,964.86	\$ 207,211.72	\$ 96,086.13	\$ 72,808.56
\$ 651,411.20	\$ 204,408.86	\$ 94,697.29	\$ 71,756.18
\$ 641,995.63	\$ 201,643.91	\$ 93,328.52	\$ 70,719.01
\$ 632,716.16	\$ 198,916.36	\$ 91,979.54	\$ 69,696.83
\$ 623,570.81	\$ 196,225.70	\$ 90,650.06	\$ 68,689.43
\$ 614,557.66	\$ 193,571.44	\$ 89,339.80	\$ 67,696.58
\$ 44,885,862.15	\$ 14,859,613.90	\$ 6,525,170.93	\$ 5,811,858.02
	Columbus Total NPV =	\$72,082,505.01	

Table 21: Columbus AFB Privatization Estimate

As previously discussed, Scoring is assumed to be zero in the cost estimate model to create the most conservative estimate possible. The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.81 for Columbus AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.2.3. Columbus AFB Identical FSRM

The Columbus AFB identical FSRM estimate included BAH, FSRM Renovation #1, O&M, Utilities, Moves, Manpower, and Out Year Renovation. The complete estimate for the identical FSRM alternative is shown in Table 22, and totaled \$36,388,119.01.

Columbus AFB Identical FSRM						
BAH	FSRM Reno 1	O&M	Utilities	Moves	Manpower	Out Year Reno
\$ 829,241.50	\$ 733,745.00	\$ 105,054.07	\$ 38,309.25	\$ 1,040,395.89	\$ 253,661.98	
\$ 549,993.84	\$ 469,235.11	\$ 103,531.54	\$ 37,754.04	\$ 793,942.09	\$ 248,953.92	
\$ 60,914.48		\$ 102,031.09	\$ 37,206.88	\$ 367,406.63	\$ 244,696.45	
\$ 60,034.02		\$ 100,552.37	\$ 36,667.65	\$ 362,170.64	\$ 241,159.58	
\$ 59,166.28		\$ 99,095.09	\$ 36,136.24	\$ 357,271.71	\$ 237,673.83	
\$ 58,311.08		\$ 97,658.93	\$ 35,612.52	\$ 352,439.05	\$ 234,238.47	
\$ 57,468.25		\$ 96,243.59	\$ 35,096.40	\$ 347,671.76	\$ 230,852.76	
\$ 56,637.60		\$ 94,848.75	\$ 34,587.76	\$ 342,968.96	\$ 227,515.99	
\$ 55,818.95		\$ 93,474.13	\$ 34,086.48	\$ 338,329.76	\$ 224,227.45	
\$ 55,012.14		\$ 92,119.43	\$ 33,592.48	\$ 333,753.32	\$ 220,986.44	
\$ 54,216.99		\$ 90,784.37	\$ 33,105.63	\$ 329,238.78	\$ 217,792.28	
\$ 53,433.33		\$ 89,468.65	\$ 32,625.84	\$ 324,785.31	\$ 214,644.29	
\$ 52,661.00		\$ 88,172.01	\$ 32,153.00	\$ 320,392.08	\$ 211,541.80	
\$ 51,899.83		\$ 86,894.15	\$ 31,687.01	\$ 316,058.27	\$ 208,484.15	
\$ 51,149.66		\$ 85,634.82	\$ 31,227.78	\$ 311,783.09	\$ 205,470.70	
\$ 50,410.34		\$ 84,393.73	\$ 30,775.21	\$ 307,565.73	\$ 202,500.80	
\$ 49,681.71		\$ 83,170.63	\$ 30,329.19	\$ 303,405.42	\$ 199,573.83	
\$ 48,963.60		\$ 81,965.26	\$ 29,889.64	\$ 299,301.39	\$ 196,689.17	
\$ 48,255.88		\$ 80,777.36	\$ 29,456.45	\$ 295,252.87	\$ 193,846.21	
\$ 47,558.38		\$ 79,606.67	\$ 29,029.55	\$ 291,259.11	\$ 191,044.33	
\$ 46,870.97		\$ 78,452.95	\$ 28,608.83	\$ 287,319.37	\$ 188,282.96	
\$ 46,193.49		\$ 77,315.96	\$ 28,194.21	\$ 283,432.93	\$ 185,561.50	
\$ 45,525.80		\$ 76,195.43	\$ 27,785.60	\$ 279,599.05	\$ 182,879.37	
\$ 44,867.77		\$ 75,091.15	\$ 27,382.91	\$ 275,817.04	\$ 180,236.01	
\$ 44,219.24		\$ 74,002.87	\$ 26,986.05	\$ 272,086.18	\$ 177,630.86	
\$ 43,580.09		\$ 72,930.37	\$ 26,594.95	\$ 268,405.78	\$ 175,063.37	
\$ 42,950.18		\$ 71,873.41	\$ 26,209.52	\$ 264,775.18	\$ 172,532.98	
\$ 42,329.38		\$ 70,831.76	\$ 25,829.67	\$ 261,193.68	\$ 170,039.17	
\$ 41,717.54		\$ 69,805.22	\$ 25,455.33	\$ 257,660.62	\$ 167,581.41	
\$ 41,114.55		\$ 68,793.55	\$ 25,086.41	\$ 254,175.36	\$ 165,159.17	
\$ 40,520.28		\$ 67,796.54	\$ 24,722.84	\$ 685,200.86	\$ 162,771.94	\$ 473,521.62
\$ 39,934.60		\$ 66,813.98	\$ 24,364.53	\$ 525,460.57	\$ 160,419.22	\$ 302,820.42
\$ 39,357.38		\$ 65,845.66	\$ 24,011.43	\$ 243,999.88	\$ 158,100.50	
\$ 38,788.50		\$ 64,891.38	\$ 23,663.43	\$ 240,699.40	\$ 155,815.30	
\$ 38,227.85		\$ 63,950.92	\$ 23,320.49	\$ 237,443.56	\$ 153,563.13	
\$ 720,698.81		\$ 63,024.10	\$ 22,982.51	\$ 234,231.77	\$ 151,343.51	
\$ 552,163.25		\$ 62,110.70	\$ 22,649.43	\$ 231,063.41	\$ 149,155.98	
\$ 36,594.04		\$ 61,210.55	\$ 22,321.18	\$ 227,937.92	\$ 147,000.06	
\$ 36,065.11		\$ 60,323.44	\$ 21,997.68	\$ 224,854.70	\$ 144,875.30	
\$ 35,543.82		\$ 59,449.19	\$ 21,678.87	\$ 221,813.19	\$ 142,781.26	
\$ 35,030.07		\$ 58,587.60	\$ 21,364.69	\$ 218,812.82	\$ 140,717.49	
\$ 34,523.74		\$ 57,738.51	\$ 21,055.05	\$ 215,853.03	\$ 138,683.54	
\$ 34,024.73		\$ 56,901.72	\$ 20,749.91	\$ 212,933.28	\$ 136,678.99	
\$ 33,532.93		\$ 56,077.06	\$ 20,449.18	\$ 210,053.02	\$ 134,703.42	
\$ 33,048.24		\$ 55,264.35	\$ 20,152.82	\$ 207,211.72	\$ 132,756.40	
\$ 32,570.56		\$ 54,463.41	\$ 19,860.75	\$ 204,408.86	\$ 130,837.53	
\$ 32,099.78		\$ 53,674.09	\$ 19,572.91	\$ 201,643.91	\$ 128,946.39	
\$ 31,635.81		\$ 52,896.20	\$ 19,289.25	\$ 198,916.36	\$ 127,082.58	
\$ 31,178.54		\$ 52,129.59	\$ 19,009.69	\$ 196,225.70	\$ 125,245.72	
\$ 30,727.88		\$ 51,374.09	\$ 18,734.19	\$ 193,571.44	\$ 123,435.40	
\$4,696,463.79	\$ 1,202,980.11	\$ 3,755,292.42	\$ 1,369,413.28	\$ 15,572,192.48	\$9,015,434.88	\$ 776,342.04
		Columbus Total NPV =	\$36,388,119.01			

Table 22: Columbus AFB Identical FSRM Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.81 for Columbus AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.3. JBSA-Fort Sam Houston Estimate

The Joint Base San Antonio (JBSA) Fort Sam Houston cost data comes from all O&M costs from the years 2008-2015. Table 23 shows the O&M costs per year as well as the average over that period.

Ft Sam Houston Data	
Year	O&M Cost Data
2014	\$ 1,790,679.04
2015	\$ 1,929,549.40
Mean	\$ 1,860,114.22

Table 23: JBSA-Fort Sam Houston O&M Cost Data

Within the O&M cost data, the facility number and square footage for each facility associated with each O&M is provided and utilized to determine the costs for JBSA-Fort Sam Houston. Table 24 details the JBSA-Fort Sam Houston initial costs.

Base	Facility	SF	New Construction Cost	Demolition Cost	New Dorm Cost	Full Renovation Cost	PRSNL	BAH	Utilities
Ft Sam	257	37893	\$ 7,250,446.62	\$ 1,098,897.00	\$ 8,349,343.62	\$ 5,844,540.53	107	\$ 1,456,372.09	\$ 30,693.33
	272	99888	\$ 19,112,569.92	\$ 2,896,752.00	\$ 22,009,321.92	\$ 15,406,525.34	281	\$ 3,839,075.70	\$ 80,909.28
	590	21921	\$ 4,194,364.14	\$ 635,709.00	\$ 4,830,073.14	\$ 3,381,051.20	62	\$ 842,507.39	\$ 17,756.01
	591	21921	\$ 4,194,364.14	\$ 635,709.00	\$ 4,830,073.14	\$ 3,381,051.20	62	\$ 842,507.39	\$ 17,756.01
	904	23900	\$ 4,573,026.00	\$ 693,100.00	\$ 5,266,126.00	\$ 3,686,288.20	67	\$ 918,567.89	\$ 19,359.00
	905	22020	\$ 4,213,306.80	\$ 638,580.00	\$ 4,851,886.80	\$ 3,396,320.76	62	\$ 846,312.34	\$ 17,836.20
	907	22020	\$ 4,213,306.80	\$ 638,580.00	\$ 4,851,886.80	\$ 3,396,320.76	62	\$ 846,312.34	\$ 17,836.20
	915	21930	\$ 4,196,086.20	\$ 635,970.00	\$ 4,832,056.20	\$ 3,382,439.34	62	\$ 842,853.30	\$ 17,763.30
	916	22020	\$ 4,213,306.80	\$ 638,580.00	\$ 4,851,886.80	\$ 3,396,320.76	62	\$ 846,312.34	\$ 17,836.20
	920	21930	\$ 4,196,086.20	\$ 635,970.00	\$ 4,832,056.20	\$ 3,382,439.34	62	\$ 842,853.30	\$ 17,763.30
	929	21930	\$ 4,196,086.20	\$ 635,970.00	\$ 4,832,056.20	\$ 3,382,439.34	62	\$ 842,853.30	\$ 17,763.30
	930	22021	\$ 4,213,498.14	\$ 638,609.00	\$ 4,852,107.14	\$ 3,396,475.00	62	\$ 846,350.77	\$ 17,837.01
	1002	89024	\$ 17,033,852.16	\$ 2,581,696.00	\$ 19,615,548.16	\$ 13,730,883.71	251	\$ 3,421,530.86	\$ 72,109.44
	1152	6448	\$ 1,233,760.32	\$ 186,992.00	\$ 1,420,752.32	\$ 994,526.62	18	\$ 247,821.16	\$ 5,222.88
	1159	6448	\$ 1,233,760.32	\$ 186,992.00	\$ 1,420,752.32	\$ 994,526.62	18	\$ 247,821.16	\$ 5,222.88
	1160	6448	\$ 1,233,760.32	\$ 186,992.00	\$ 1,420,752.32	\$ 994,526.62	18	\$ 247,821.16	\$ 5,222.88
	1350	270889	\$ 51,831,901.26	\$ 7,855,781.00	\$ 59,687,682.26	\$ 41,781,377.58	763	\$ 10,411,294.41	\$ 219,420.09
	1380	112892	\$ 21,600,755.28	\$ 3,273,868.00	\$ 24,874,623.28	\$ 17,412,236.30	318	\$ 4,338,868.87	\$ 91,442.52
	1382	29948	\$ 5,730,250.32	\$ 868,492.00	\$ 6,598,742.32	\$ 4,619,119.62	84	\$ 1,151,015.53	\$ 24,257.88
	1469	329191	\$ 62,987,405.94	\$ 9,546,539.00	\$ 72,533,944.94	\$ 50,773,761.46	927	\$ 12,652,061.98	\$ 266,644.71
	1475	329191	\$ 62,987,405.94	\$ 9,546,539.00	\$ 72,533,944.94	\$ 50,773,761.46	927	\$ 12,652,061.98	\$ 266,644.71
	1479	329191	\$ 62,987,405.94	\$ 9,546,539.00	\$ 72,533,944.94	\$ 50,773,761.46	927	\$ 12,652,061.98	\$ 266,644.71
	2791	125124	\$ 23,941,226.16	\$ 3,628,596.00	\$ 27,569,822.16	\$ 19,298,875.51	352	\$ 4,808,991.14	\$ 101,350.44
	3312	190808	\$ 36,509,202.72	\$ 5,533,432.00	\$ 42,042,634.72	\$ 29,429,844.30	537	\$ 7,333,477.05	\$ 154,554.48
	3314	329191	\$ 62,987,405.94	\$ 9,546,539.00	\$ 72,533,944.94	\$ 50,773,761.46	927	\$ 12,652,061.98	\$ 266,644.71
	3631	81694	\$ 15,631,329.96	\$ 2,369,126.00	\$ 18,000,455.96	\$ 12,600,319.17	230	\$ 3,139,811.09	\$ 66,172.14
	3635	38536	\$ 7,373,478.24	\$ 1,117,544.00	\$ 8,491,022.24	\$ 5,943,715.57	109	\$ 1,481,085.03	\$ 31,214.16
	3820	216873	\$ 41,496,479.82	\$ 6,289,317.00	\$ 47,785,796.82	\$ 33,450,057.77	611	\$ 8,335,254.12	\$ 175,667.13
	5401	20279	\$ 3,880,183.86	\$ 588,091.00	\$ 4,468,274.86	\$ 3,127,792.40	57	\$ 779,399.09	\$ 16,425.99
	5413	39362	\$ 7,531,525.08	\$ 1,141,498.00	\$ 8,673,023.08	\$ 6,071,116.16	111	\$ 1,512,831.35	\$ 31,883.22

Table 24: JBSA-Fort Sam Houston Initial Costs

The new construction costs were determined by multiplying the square footage of each facility by the union dormitory per square footage cost of \$191.34 shown in Table 12 (RS Means, 2016). The Union price used to calculate the new construction costs was used based on the aforementioned assumption that the estimate should be as conservative as possible to ensure the integrity of the cost estimation model. The demolition price was calculated by multiplying the square footage by the average Air Force demolition cost of \$29.00 per square foot (UFC 3-730-01, 2011). The new construction cost was added to the demolition cost to determine the complete cost to construct a new dormitory. Since no new construction will be occurring in any phase (status quo, privatization, or identical FSRM), the full renovation cost is calculated by multiplying the new dorm cost by 70%. The 70% is the estimated cost for full renovation used by all accompanied housing

privatization estimates, which drives its use in this model (AETC Group I, 2005). With the number of personnel in each existing dormitory not available, the number of personnel is determined by dividing the actual square footage of each facility by 355 square foot per person to accommodate the Dorms-4-Airmen construct (AFUHDG, 2016). BAH is determined by multiplying the number of personnel by the BAH rate for JBSA-Fort Sam Houston, which is \$1,137.00 per month or \$13,644.00 per year. Finally, the initial utilities costs are calculated by multiplying the facility square footage by the \$0.81 per square foot historical average for federal dormitories (DOE, 2016).

The initial Manpower calculation for JBSA-Fort Sam Houston is shown in Table 25.

Ft Sam Houston									
Grade Housing Office	Base Pay	Approx Benefits (32.85%)*	STATUS QUO		IDENTICAL FSRM		PRIVATIZATION		Military Grade Equivalent
			Positions	Funding	Positions	Funding	Positions	Funding	
GS-11/7	\$ 63,337.00	\$ 20,806.20	1	\$ 84,143.20	1	\$ 84,143.20	1	\$ 84,143.20	O-3
GS-9/10	\$ 56,706.00	\$ 18,627.92	1	\$ 75,333.92	1	\$ 75,333.92	1	\$ 75,333.92	O-2
GS-9/8	\$ 53,799.00	\$ 17,672.97	1	\$ 71,471.97	1	\$ 71,471.97	1	\$ 71,471.97	O-1
GS-7/10	\$ 46,362.00	\$ 15,229.92	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/9	\$ 45,173.00	\$ 14,839.33	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/5	\$ 40,418.00	\$ 13,277.31	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/4	\$ 39,229.00	\$ 12,886.73	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/3	\$ 38,040.00	\$ 12,496.14	8	\$ 404,289.12	8	\$ 404,289.12	0	\$ -	E-7
GS-5/8	\$ 35,512.00	\$ 11,665.69	16	\$ 754,843.07	16	\$ 754,843.07	0	\$ -	E-6
GS-4/4	\$ 28,305.00	\$ 9,298.19	32	\$ 1,203,302.16	32	\$ 1,203,302.16	0	\$ -	E-5
			59	\$ 2,593,383.45	59	\$ 2,593,383.45		\$ 230,949.10	

Table 25: JBSA-Fort Sam Houston Manpower Initial Costs

The number of personnel in the status quo and identical FSRM alternatives are based on the allotted personnel per number of individuals living in unaccompanied housing per installation. JBSA-Fort Sam Houston has 8,200 individuals occupying unaccompanied housing units, which earns one GS-11/7, one GS-9/10, one GS-9/8, eight Air Force Master Sergeants, 16 Air Force Technical Sergeants and 32 Air Force Staff Sergeants (AFI 32-

6005, 2013). In the privatization alternative, only Flight leadership will be retained to run the Asset Management Flight, which includes one GS-11/7, one GS-9/10, and one GS-9/8. The JBSA-Fort Sam Houston initial costs combined with the JBSA-Fort Sam Houston manpower initial cost calculations provide the basis for each calculation in the status quo, privatization, and identical FSRM alternative.

4.2.3.1. JBSA-Fort Sam Houston Status Quo

The JBSA-Fort Sam Houston status quo estimate included BAH, O&M, Utilities, Moves, and Manpower. The complete estimate for the status quo alternative is shown in Table 26, and totaled \$1,091,961,865.96.

JBSA-Fort Sam Houston Status Quo					
Year	BAH	O&M	Utilities	Moves	Manpower
1	\$ 5,491,217.32	\$ 1,597,300.33	\$ 2,024,714.99	\$ 18,951,622.12	\$ 2,188,892.81
2	\$ 5,390,412.36	\$ 1,574,151.05	\$ 1,995,371.30	\$ 18,603,717.94	\$ 2,148,266.11
3	\$ 5,299,270.12	\$ 1,551,337.27	\$ 1,966,452.87	\$ 18,289,162.33	\$ 2,111,527.65
4	\$ 5,223,749.12	\$ 1,528,854.12	\$ 1,937,953.56	\$ 18,028,519.68	\$ 2,081,007.40
5	\$ 5,153,089.71	\$ 1,506,696.81	\$ 1,909,867.27	\$ 17,784,655.64	\$ 2,050,928.30
6	\$ 5,083,386.09	\$ 1,484,860.63	\$ 1,882,188.04	\$ 17,544,090.25	\$ 2,021,283.96
7	\$ 5,014,625.31	\$ 1,463,340.91	\$ 1,854,909.95	\$ 17,306,778.88	\$ 1,992,068.11
8	\$ 4,946,794.63	\$ 1,442,133.07	\$ 1,828,027.20	\$ 17,072,677.53	\$ 1,963,274.55
9	\$ 4,879,881.46	\$ 1,421,232.59	\$ 1,801,534.05	\$ 16,841,742.76	\$ 1,934,897.17
10	\$ 4,813,873.40	\$ 1,400,635.02	\$ 1,775,424.86	\$ 16,613,931.75	\$ 1,906,929.96
11	\$ 4,748,758.21	\$ 1,380,335.96	\$ 1,749,694.07	\$ 16,389,202.23	\$ 1,879,366.99
12	\$ 4,684,523.80	\$ 1,360,331.09	\$ 1,724,336.18	\$ 16,167,512.54	\$ 1,852,202.42
13	\$ 4,621,158.26	\$ 1,340,616.15	\$ 1,699,345.80	\$ 15,948,821.55	\$ 1,825,430.49
14	\$ 4,558,649.84	\$ 1,321,186.93	\$ 1,674,717.60	\$ 15,733,088.70	\$ 1,799,045.52
15	\$ 4,496,986.94	\$ 1,302,039.29	\$ 1,650,446.33	\$ 15,520,273.97	\$ 1,773,041.93
16	\$ 4,436,158.13	\$ 1,283,169.15	\$ 1,626,526.82	\$ 15,310,337.90	\$ 1,747,414.19
17	\$ 4,376,152.13	\$ 1,264,572.50	\$ 1,602,953.97	\$ 15,103,241.54	\$ 1,722,156.88
18	\$ 4,316,957.80	\$ 1,246,245.36	\$ 1,579,722.75	\$ 14,898,946.49	\$ 1,697,264.64
19	\$ 4,258,564.17	\$ 1,228,183.84	\$ 1,556,828.22	\$ 14,697,414.84	\$ 1,672,732.20
20	\$ 4,200,960.40	\$ 1,210,384.07	\$ 1,534,265.49	\$ 14,498,609.23	\$ 1,648,554.35
21	\$ 4,144,135.82	\$ 1,192,842.27	\$ 1,512,029.76	\$ 14,302,492.78	\$ 1,624,725.97
22	\$ 4,088,079.87	\$ 1,175,554.70	\$ 1,490,116.28	\$ 14,109,029.11	\$ 1,601,242.01
23	\$ 4,032,782.17	\$ 1,158,517.68	\$ 1,468,520.39	\$ 13,918,182.34	\$ 1,578,097.49
24	\$ 3,978,232.46	\$ 1,141,727.57	\$ 1,447,237.49	\$ 13,729,917.07	\$ 1,555,287.50
25	\$ 3,924,420.62	\$ 1,125,180.79	\$ 1,426,263.03	\$ 13,544,198.39	\$ 1,532,807.21
26	\$ 3,871,336.67	\$ 1,108,873.82	\$ 1,405,592.56	\$ 13,360,991.84	\$ 1,510,651.85
27	\$ 3,818,970.77	\$ 1,092,803.19	\$ 1,385,221.65	\$ 13,180,263.45	\$ 1,488,816.72
28	\$ 3,767,313.19	\$ 1,076,965.46	\$ 1,365,145.97	\$ 13,001,979.69	\$ 1,467,297.21
29	\$ 3,716,354.37	\$ 1,061,357.26	\$ 1,345,361.25	\$ 12,826,107.50	\$ 1,446,088.74
30	\$ 3,666,084.84	\$ 1,045,975.28	\$ 1,325,863.26	\$ 12,652,614.26	\$ 1,425,186.82
31	\$ 3,616,495.28	\$ 1,030,816.21	\$ 1,306,647.85	\$ 12,481,467.78	\$ 1,404,587.02
32	\$ 3,567,576.51	\$ 1,015,876.85	\$ 1,287,710.92	\$ 12,312,636.34	\$ 1,384,284.97
33	\$ 3,519,319.43	\$ 1,001,154.00	\$ 1,269,048.45	\$ 12,146,088.60	\$ 1,364,276.37
34	\$ 3,471,715.11	\$ 986,644.52	\$ 1,250,656.44	\$ 11,981,793.68	\$ 1,344,556.97
35	\$ 3,424,754.72	\$ 972,345.32	\$ 1,232,530.99	\$ 11,819,721.11	\$ 1,325,122.60
36	\$ 3,378,429.53	\$ 958,253.36	\$ 1,214,668.22	\$ 11,659,840.82	\$ 1,305,969.14
37	\$ 3,332,730.97	\$ 944,365.63	\$ 1,197,064.33	\$ 11,502,123.17	\$ 1,287,092.52
38	\$ 3,287,650.55	\$ 930,679.17	\$ 1,179,715.57	\$ 11,346,538.89	\$ 1,268,488.75
39	\$ 3,243,179.91	\$ 917,191.07	\$ 1,162,618.24	\$ 11,193,059.14	\$ 1,250,153.88
40	\$ 3,199,310.81	\$ 903,898.44	\$ 1,145,768.70	\$ 11,041,655.44	\$ 1,232,084.02
41	\$ 3,156,035.11	\$ 890,798.47	\$ 1,129,163.36	\$ 10,892,299.72	\$ 1,214,275.35
42	\$ 3,113,344.78	\$ 877,888.34	\$ 1,112,798.67	\$ 10,744,964.26	\$ 1,196,724.08
43	\$ 3,071,231.90	\$ 865,165.32	\$ 1,096,671.16	\$ 10,599,621.75	\$ 1,179,426.51
44	\$ 3,029,688.67	\$ 852,626.70	\$ 1,080,777.37	\$ 10,456,245.22	\$ 1,162,378.95
45	\$ 2,988,707.38	\$ 840,269.79	\$ 1,065,113.93	\$ 10,314,808.09	\$ 1,145,577.80
46	\$ 2,948,280.42	\$ 828,091.96	\$ 1,049,677.50	\$ 10,175,284.12	\$ 1,129,019.50
47	\$ 2,908,400.29	\$ 816,090.63	\$ 1,034,464.78	\$ 10,037,647.42	\$ 1,112,700.53
48	\$ 2,869,059.61	\$ 804,263.23	\$ 1,019,472.54	\$ 9,901,872.48	\$ 1,096,617.44
49	\$ 2,830,251.08	\$ 792,607.24	\$ 1,004,697.57	\$ 9,767,934.11	\$ 1,080,766.81
50	\$ 2,791,967.49	\$ 781,120.18	\$ 990,136.74	\$ 9,635,807.47	\$ 1,065,145.29
Total =	\$ 198,751,009.55	\$ 57,097,550.58	\$ 72,376,036.30	\$ 685,941,533.92	\$ 77,795,735.60
		Ft Sam Houston Total NPV =	\$ 1,091,961,865.96		

Table 26: JBSA-Fort Sam Houston Status Quo Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.86 for JBSA-Fort Sam Houston found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.3.2. JBSA-Fort Sam Houston Privatization

The JBSA-Fort Sam Houston privatization estimate included BAH, Moves, Manpower, and Project Management. The complete estimate for the privatization alternative is shown in Table 27, and totaled \$4,652,085,661.37.

JBSA-Fort Sam Houston Privatization			
BAH	Moves	Manpower	Proj Mgt
\$ 109,800,565.45	\$ 21,514,546.34	\$ 194,927.91	\$ 476,876.81
\$ 107,762,624.52	\$ 19,404,271.05	\$ 191,309.97	\$ 414,182.12
\$ 105,919,727.47	\$ 19,113,482.14	\$ 188,038.30	\$ 407,099.01
\$ 104,388,752.47	\$ 18,806,232.02	\$ 185,320.37	\$ 401,214.75
\$ 102,879,906.35	\$ 18,551,848.20	\$ 182,641.73	\$ 395,415.55
\$ 101,392,869.25	\$ 18,300,922.55	\$ 180,001.81	\$ 389,700.17
\$ 99,927,325.94	\$ 19,302,630.65	\$ 177,400.04	\$ 384,067.41
\$ 98,482,965.75	\$ 17,288,778.49	\$ 174,835.88	\$ 378,516.06
\$ 97,059,482.49	\$ 23,185,850.42	\$ 172,308.79	\$ 373,044.94
\$ 95,656,574.42	\$ 22,470,389.78	\$ 169,818.22	\$ 367,652.91
\$ 94,273,944.13	\$ 26,883,457.90	\$ 167,363.65	\$ 362,338.82
\$ 92,911,298.52	\$ 20,645,774.50	\$ 164,944.55	\$ 357,101.53
\$ 91,568,348.73	\$ 21,846,305.98	\$ 162,560.43	\$ 351,939.95
\$ 90,244,810.09	\$ 19,150,698.16	\$ 160,210.76	\$ 346,852.97
\$ 88,940,402.01	\$ 15,899,683.86	\$ 157,895.06	\$ 341,839.52
\$ 87,654,847.99	\$ 15,310,337.90	\$ 155,612.83	\$ 117,914.49
\$ 86,387,875.50	\$ 15,103,241.54	\$ 153,363.58	\$ 116,210.14
\$ 85,139,215.97	\$ 14,898,946.49	\$ 151,146.85	\$ 114,530.43
\$ 83,908,604.69	\$ 14,697,414.84	\$ 148,962.16	\$ 112,874.99
\$ 82,695,780.80	\$ 14,498,609.23	\$ 146,809.04	\$ 111,243.48
\$ 81,500,487.20	\$ 14,302,492.78	\$ 144,687.05	\$ 109,635.56
\$ 80,322,470.49	\$ 14,109,029.11	\$ 142,595.73	\$ 108,050.88
\$ 79,161,480.97	\$ 13,918,182.34	\$ 140,534.63	\$ 106,489.10
\$ 78,017,272.51	\$ 13,729,917.07	\$ 138,503.33	\$ 104,949.89
\$ 76,889,602.56	\$ 13,544,198.39	\$ 136,501.39	\$ 103,432.93
\$ 75,778,232.07	\$ 13,360,991.84	\$ 134,528.38	\$ 101,937.90
\$ 74,682,925.45	\$ 13,180,263.45	\$ 132,583.89	\$ 100,464.48
\$ 73,603,450.51	\$ 13,001,979.69	\$ 130,667.51	\$ 99,012.36
\$ 72,539,578.41	\$ 12,826,107.50	\$ 128,778.83	\$ 97,581.22
\$ 71,491,083.64	\$ 12,652,614.26	\$ 126,917.45	\$ 96,170.77
\$ 70,457,743.92	\$ 12,481,467.78	\$ 125,082.97	\$ 257,261.93
\$ 69,439,340.20	\$ 12,312,636.34	\$ 123,275.01	\$ 253,543.44
\$ 68,435,656.60	\$ 12,146,088.60	\$ 121,493.18	\$ 249,878.70
\$ 67,446,480.34	\$ 11,981,793.68	\$ 119,737.10	\$ 246,266.92
\$ 66,471,601.75	\$ 11,819,721.11	\$ 118,006.41	\$ 242,707.35
\$ 65,510,814.15	\$ 11,659,840.82	\$ 116,300.73	\$ 239,199.24
\$ 64,563,913.88	\$ 11,502,123.17	\$ 114,619.71	\$ 235,741.83
\$ 63,630,700.21	\$ 11,346,538.89	\$ 112,962.98	\$ 232,334.39
\$ 62,710,975.30	\$ 11,193,059.14	\$ 111,330.20	\$ 228,976.20
\$ 61,804,544.20	\$ 11,041,655.44	\$ 109,721.03	\$ 225,666.56
\$ 60,911,214.75	\$ 10,892,299.72	\$ 108,135.11	\$ 222,404.75
\$ 60,030,797.58	\$ 10,744,964.26	\$ 106,572.11	\$ 219,190.09
\$ 59,163,106.05	\$ 10,599,621.75	\$ 105,031.71	\$ 216,021.89
\$ 58,307,956.23	\$ 10,456,245.22	\$ 103,513.57	\$ 212,899.49
\$ 57,465,166.83	\$ 10,314,808.09	\$ 102,017.37	\$ 209,822.21
\$ 56,634,559.20	\$ 10,175,284.12	\$ 100,542.80	\$ 76,185.58
\$ 55,815,957.27	\$ 10,037,647.42	\$ 99,089.54	\$ 75,084.38
\$ 55,009,187.49	\$ 9,901,872.48	\$ 97,657.29	\$ 73,999.10
\$ 54,214,078.84	\$ 9,767,934.11	\$ 96,245.74	\$ 72,929.51
\$ 53,430,462.79	\$ 9,635,807.47	\$ 94,854.60	\$ 71,875.38
\$ 3,902,436,763.92	\$ 731,510,608.09	\$ 6,927,959.26	\$ 11,210,330.09
	Ft Sam Houston Total NPV =	\$ 4,652,085,661.37	

Table 27: JBSA-Fort Sam Houston Privatization Estimate

As previously discussed, Scoring is assumed to be zero in the cost estimate model to create the most conservative estimate possible. The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.86 for JBSA-Fort Sam Houston found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.3.3. JBSA-Fort Sam Houston Identical FSRM

The JBSA-Fort Sam Houston identical FSRM estimate included BAH, FSRM Renovation #1, O&M, Utilities, Moves, Manpower, and Out Year Renovation. The complete estimate for the identical FSRM alternative is shown in Table 28, and totaled \$1,410,407,242.84.

JBSA-Fort Sam Houston Identical FSRM						
BAH	FSRM Reno 1	O&M	Utilities	Moves	Manpower	Out Year Reno
\$ 10,689,453.98	\$ 3,026,636.06	\$ 1,597,300.33	\$ 2,024,714.99	\$ 21,514,546.34	\$ 2,188,892.81	
\$ 7,014,129.71	\$ 949,119.84	\$ 1,574,151.05	\$ 1,995,371.30	\$ 19,404,271.05	\$ 2,148,266.11	
\$ 6,966,872.38	\$ 979,698.39	\$ 1,551,337.27	\$ 1,966,452.87	\$ 19,113,482.14	\$ 2,111,527.65	
\$ 6,795,526.40	\$ 924,079.24	\$ 1,528,854.12	\$ 1,937,953.56	\$ 18,806,232.02	\$ 2,081,007.40	
\$ 6,697,303.14	\$ 910,686.79	\$ 1,506,696.81	\$ 1,909,867.27	\$ 18,551,848.20	\$ 2,050,928.30	
\$ 6,600,534.44	\$ 897,508.85	\$ 1,484,860.63	\$ 1,882,188.04	\$ 18,300,922.55	\$ 2,021,283.96	
\$ 8,273,758.19	\$ 1,921,347.07	\$ 1,463,340.91	\$ 1,854,909.95	\$ 19,302,630.65	\$ 1,992,068.11	
\$ 5,360,447.30	\$ 255,767.08	\$ 1,442,133.07	\$ 1,828,027.20	\$ 17,288,778.49	\$ 1,963,274.55	
\$ 17,649,424.90	\$ 7,501,237.50	\$ 1,421,232.59	\$ 1,801,534.05	\$ 23,185,850.42	\$ 1,934,897.17	
\$ 16,584,553.49	\$ 6,917,861.08	\$ 1,400,635.02	\$ 1,775,424.86	\$ 22,470,389.78	\$ 1,906,929.96	
\$ 26,036,177.16	\$ 12,498,187.58	\$ 1,380,335.96	\$ 1,749,694.07	\$ 26,883,457.90	\$ 1,879,366.99	
\$ 14,729,504.52	\$ 5,910,476.96	\$ 1,360,331.09	\$ 1,724,336.18	\$ 20,645,774.50	\$ 1,852,202.42	
\$ 17,503,512.87	\$ 7,575,460.20	\$ 1,340,616.15	\$ 1,699,345.80	\$ 21,846,305.98	\$ 1,825,430.49	
\$ 12,430,441.49	\$ 4,640,713.44	\$ 1,321,186.93	\$ 1,674,717.60	\$ 19,150,698.16	\$ 1,799,045.52	
\$ 6,269,287.45	\$ 1,067,955.84	\$ 1,302,039.29	\$ 1,650,446.33	\$ 15,899,683.86	\$ 1,773,041.93	
\$ 4,382,742.40		\$ 1,283,169.15	\$ 1,626,526.82	\$ 15,310,337.90	\$ 1,747,414.19	
\$ 4,319,393.78		\$ 1,264,572.50	\$ 1,602,953.97	\$ 15,103,241.54	\$ 1,722,156.88	
\$ 4,256,960.80		\$ 1,246,245.36	\$ 1,579,722.75	\$ 14,898,946.49	\$ 1,697,264.64	
\$ 4,195,430.23		\$ 1,228,183.84	\$ 1,556,828.22	\$ 14,697,414.84	\$ 1,672,732.20	
\$ 4,134,789.04		\$ 1,210,384.07	\$ 1,534,265.49	\$ 14,498,609.23	\$ 1,648,554.35	
\$ 4,075,024.36		\$ 1,192,842.27	\$ 1,512,029.76	\$ 14,302,492.78	\$ 1,624,725.97	
\$ 4,016,123.52		\$ 1,175,554.70	\$ 1,490,116.28	\$ 14,109,029.11	\$ 1,601,242.01	
\$ 3,958,074.05		\$ 1,158,517.68	\$ 1,468,520.39	\$ 13,918,182.34	\$ 1,578,097.49	
\$ 3,900,863.63		\$ 1,141,727.57	\$ 1,447,237.49	\$ 13,729,917.07	\$ 1,555,287.50	
\$ 3,844,480.13		\$ 1,125,180.79	\$ 1,426,263.03	\$ 13,544,198.39	\$ 1,532,807.21	
\$ 3,788,911.60		\$ 1,108,873.82	\$ 1,405,592.56	\$ 13,360,991.84	\$ 1,510,651.85	
\$ 3,734,146.27		\$ 1,092,803.19	\$ 1,385,221.65	\$ 13,180,263.45	\$ 1,488,816.72	
\$ 3,680,172.53		\$ 1,076,965.46	\$ 1,365,145.97	\$ 13,001,979.69	\$ 1,467,297.21	
\$ 3,626,978.92		\$ 1,061,357.26	\$ 1,345,361.25	\$ 12,826,107.50	\$ 1,446,088.74	
\$ 3,574,554.18		\$ 1,045,975.28	\$ 1,325,863.26	\$ 12,652,614.26	\$ 1,425,186.82	
\$ 3,522,887.20		\$ 1,030,816.21	\$ 1,306,647.85	\$ 14,169,400.14	\$ 1,404,587.02	\$ 1,953,236.64
\$ 3,471,967.01		\$ 1,015,876.85	\$ 1,287,710.92	\$ 12,842,472.33	\$ 1,384,284.97	\$ 612,513.56
\$ 3,421,782.83		\$ 1,001,154.00	\$ 1,269,048.45	\$ 12,693,530.92	\$ 1,364,276.37	\$ 632,247.40
\$ 3,372,324.02		\$ 986,644.52	\$ 1,250,656.44	\$ 12,498,663.01	\$ 1,344,556.97	\$ 596,353.64
\$ 3,323,580.09		\$ 972,345.32	\$ 1,232,530.99	\$ 12,329,598.97	\$ 1,325,122.60	\$ 587,710.83
\$ 6,376,316.88		\$ 958,253.36	\$ 1,214,668.22	\$ 12,162,833.23	\$ 1,305,969.14	\$ 579,206.46
\$ 4,200,603.19		\$ 944,365.63	\$ 1,197,064.33	\$ 12,579,962.63	\$ 1,287,092.52	\$ 1,239,939.46
\$ 4,185,310.69		\$ 930,679.17	\$ 1,179,715.57	\$ 11,490,160.07	\$ 1,268,488.75	\$ 165,059.04
\$ 4,082,375.52		\$ 917,191.07	\$ 1,162,618.24	\$ 15,409,366.99	\$ 1,250,153.88	\$ 4,840,916.31
\$ 4,023,368.43		\$ 903,898.44	\$ 1,145,768.70	\$ 14,933,870.28	\$ 1,232,084.02	\$ 4,464,434.91
\$ 3,965,235.16		\$ 890,798.47	\$ 1,129,163.36	\$ 17,931,082.72	\$ 1,214,275.35	\$ 8,065,693.19
\$ 4,970,415.23		\$ 877,888.34	\$ 1,112,798.67	\$ 14,076,915.50	\$ 1,196,724.08	\$ 3,814,320.55
\$ 3,220,259.56		\$ 865,165.32	\$ 1,096,671.16	\$ 14,874,371.54	\$ 1,179,426.51	\$ 4,888,815.86
\$ 10,602,796.02		\$ 852,626.70	\$ 1,080,777.37	\$ 13,077,516.70	\$ 1,162,378.95	\$ 2,994,879.90
\$ 9,963,080.31		\$ 840,269.79	\$ 1,065,113.93	\$ 10,918,626.17	\$ 1,145,577.80	\$ 689,204.26
\$ 15,641,091.82		\$ 828,091.96	\$ 1,049,677.50	\$ 10,175,284.12	\$ 1,129,019.50	
\$ 8,848,669.73		\$ 816,090.63	\$ 1,034,464.78	\$ 10,037,647.42	\$ 1,112,700.53	
\$ 10,515,140.16		\$ 804,263.23	\$ 1,019,472.54	\$ 9,901,872.48	\$ 1,096,617.44	
\$ 7,467,520.12		\$ 792,607.24	\$ 1,004,697.57	\$ 9,767,934.11	\$ 1,080,766.81	
\$ 3,766,240.34		\$ 781,120.18	\$ 990,136.74	\$ 9,635,807.47	\$ 1,065,145.29	
\$ 348,030,537.16	\$ 55,976,735.93	\$ 57,097,550.58	\$ 72,376,036.30	\$ 763,006,115.24	\$ 77,795,735.60	\$ 36,124,532.02
		Ft Sam Houston Total NPV =	\$ 1,410,407,242.84			

Table 28: JBSA-Fort Sam Houston Identical FSRM Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.86 for JBSA-Fort Sam Houston found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.4. Goodfellow AFB Estimate

The Goodfellow AFB cost data comes from all O&M costs from the years 2008-2015. Table 29 shows the O&M costs per year as well as the average over that period.

Goodfellow Data	
Year	O&M Cost Data
2008	\$ 847,968.20
2009	\$ 1,120,077.47
2010	\$ 985,488.94
2011	\$ 5,288,101.81
2012	\$ 1,888,609.69
2013	\$ 1,755,866.00
2014	\$ 972,027.82
2015	\$ 1,399,725.08
Mean	\$ 1,782,233.13

Table 29: Goodfellow AFB O&M Cost Data

Within the O&M cost data, the facility number and square footage for each facility associated with each O&M is provided and utilized to determine the costs for Goodfellow AFB. Table 30 details the Goodfellow AFB initial costs.

Base	Facility	SF	New Construction Cost	Demolition Cost	New Dorm Cost	Full Renovation Cost	PRSNL	BAH	Utilities
Goodfellow	238	20715	\$ 3,963,608.10	\$ 600,735.00	\$ 4,564,343.10	\$ 3,195,040.17	58	\$ 588,189.30	\$ 16,779.15
	239	20706	\$ 3,961,886.04	\$ 600,474.00	\$ 4,562,360.04	\$ 3,193,652.03	58	\$ 587,933.75	\$ 16,771.86
	240	20715	\$ 3,963,608.10	\$ 600,735.00	\$ 4,564,343.10	\$ 3,195,040.17	58	\$ 588,189.30	\$ 16,779.15
	241	22072	\$ 4,223,256.48	\$ 640,088.00	\$ 4,863,344.48	\$ 3,404,341.14	62	\$ 626,720.45	\$ 17,878.32
	242	22073	\$ 4,223,447.82	\$ 640,117.00	\$ 4,863,564.82	\$ 3,404,495.37	62	\$ 626,748.85	\$ 17,879.13
	243	10747	\$ 2,056,330.98	\$ 311,663.00	\$ 2,367,993.98	\$ 1,657,595.79	30	\$ 305,154.25	\$ 8,705.07
	250	22799	\$ 4,362,360.66	\$ 661,171.00	\$ 5,023,531.66	\$ 3,516,472.16	64	\$ 647,363.15	\$ 18,467.19
	255	25096	\$ 4,801,868.64	\$ 727,784.00	\$ 5,529,652.64	\$ 3,870,756.85	71	\$ 712,585.01	\$ 20,327.76
	257	22801	\$ 4,362,743.34	\$ 661,229.00	\$ 5,023,972.34	\$ 3,516,780.64	64	\$ 647,419.94	\$ 18,468.81
	356	27705	\$ 5,301,074.70	\$ 803,445.00	\$ 6,104,519.70	\$ 4,273,163.79	78	\$ 786,665.92	\$ 22,441.05
	700	67936	\$ 12,998,874.24	\$ 1,970,144.00	\$ 14,969,018.24	\$ 10,478,312.77	191	\$ 1,928,999.66	\$ 55,028.16
	3139	116514	\$ 22,293,788.76	\$ 3,378,906.00	\$ 25,672,694.76	\$ 17,970,886.33	328	\$ 3,308,341.18	\$ 94,376.34
	3206	81082	\$ 15,514,229.88	\$ 2,351,378.00	\$ 17,865,607.88	\$ 12,505,925.52	228	\$ 2,302,272.00	\$ 65,676.42
	3210	16298	\$ 3,118,459.32	\$ 472,642.00	\$ 3,591,101.32	\$ 2,513,770.92	46	\$ 462,771.38	\$ 13,201.38
	3227	50415	\$ 9,646,406.10	\$ 1,462,035.00	\$ 11,108,441.10	\$ 7,775,908.77	142	\$ 1,431,501.97	\$ 40,836.15
	3307	50082	\$ 9,582,689.88	\$ 1,452,378.00	\$ 11,035,067.88	\$ 7,724,547.52	141	\$ 1,422,046.65	\$ 40,566.42
	3311	91909	\$ 17,585,868.06	\$ 2,665,361.00	\$ 20,251,229.06	\$ 14,175,860.34	259	\$ 2,609,697.80	\$ 74,446.29

Table 30: Goodfellow AFB Initial Costs

The new construction costs were determined by multiplying the square footage of each facility by the union dormitory per square footage cost of \$191.34 shown in Table 12 (RS Means, 2016). The Union price used to calculate the new construction costs was used based on the aforementioned assumption that the estimate should be as conservative as possible to ensure the integrity of the cost estimation model. The demolition price was calculated by multiplying the square footage by the average Air Force demolition cost of \$29.00 per square foot (UFC 3-730-01, 2011). The new construction cost was added to the demolition cost to determine the complete cost to construct a new dormitory. Since no new construction will be occurring in any phase (status quo, privatization, or identical FSRM), the full renovation cost is calculated by multiplying the new dorm cost by 70%. The 70% is the estimated cost for full renovation used by all accompanied housing privatization estimates, which drives its use in this model (AETC Group I, 2005). With the number of personnel in each existing dormitory not available, the number of personnel is determined by dividing the actual square footage of each facility by 355

square foot per person to accommodate the Dorms-4-Airmen construct (AFUHDG, 2016). BAH is determined by multiplying the number of personnel by the BAH rate for Goodfellow AFB, which is \$840.00 per month or \$10,080.00 per year. Finally, the initial utilities costs are calculated by multiplying the facility square footage by the \$0.81 per square foot historical average for federal dormitories (DOE, 2016).

The initial Manpower calculation for Goodfellow AFB is shown in Table 31.

Goodfellow									
Grade Housing Office	Base Pay	Approx Benefits (32.85%)*	STATUS QUO		IDENTICAL FSRM		PRIVATIZATION		Military Grade Equivalent
			Positions	Funding	Positions	Funding	Positions	Funding	
GS-11/7	\$ 63,337.00	\$ 20,806.20	1	\$ 84,143.20	1	\$ 84,143.20	1	\$ 84,143.20	O-3
GS-9/10	\$ 56,706.00	\$ 18,627.92	1	\$ 75,333.92	1	\$ 75,333.92	1	\$ 75,333.92	O-2
GS-9/8	\$ 53,799.00	\$ 17,672.97	1	\$ 71,471.97	1	\$ 71,471.97	1	\$ 71,471.97	O-1
GS-7/10	\$ 46,362.00	\$ 15,229.92	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/9	\$ 45,173.00	\$ 14,839.33	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/5	\$ 40,418.00	\$ 13,277.31	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/4	\$ 39,229.00	\$ 12,886.73	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/3	\$ 38,040.00	\$ 12,496.14	2	\$ 101,072.28	2	\$ 101,072.28	0	\$ -	E-7
GS-5/8	\$ 35,512.00	\$ 11,665.69	4	\$ 188,710.77	4	\$ 188,710.77	0	\$ -	E-6
GS-4/4	\$ 28,305.00	\$ 9,298.19	8	\$ 300,825.54	8	\$ 300,825.54	0	\$ -	E-5
			17	\$ 821,557.69	17	\$ 821,557.69		\$ 230,949.10	

Table 31: Goodfellow AFB Manpower Initial Costs

The number of personnel in the status quo and identical FSRM alternatives are based on the allotted personnel per number of individuals living in unaccompanied housing per installation. Goodfellow AFB has 1,943 individuals occupying unaccompanied housing units, which earns one GS-11/7, one GS-9/10, one GS-9/8, two Air Force Master Sergeants, four Air Force Technical Sergeants and eight Air Force Staff Sergeants (AFI 32-6005, 2013). In the privatization alternative, only Flight leadership will be retained to run the Asset Management Flight, which includes one GS-11/7, one GS-9/10, and one GS-9/8. The Goodfellow AFB initial costs combined with the Goodfellow AFB manpower initial cost

calculations provide the basis for each calculation in the status quo, privatization, and identical FSRM alternative.

4.2.4.1. Goodfellow AFB Status Quo

The Goodfellow AFB status quo estimate included BAH, O&M, Utilities, Moves, and Manpower. The complete estimate for the status quo alternative is shown in Table 32, and totaled \$298,291,059.56.

Goodfellow AFB Status Quo					
Year	BAH	O&M	Utilities	Moves	Manpower
1	\$ 961,155.66	\$ 1,601,605.45	\$ 502,012.15	\$ 4,490,065.37	\$ 725,671.19
2	\$ 943,511.26	\$ 1,578,393.78	\$ 494,736.62	\$ 4,407,639.05	\$ 712,202.45
3	\$ 927,558.17	\$ 1,555,518.51	\$ 487,566.52	\$ 4,333,113.75	\$ 700,022.76
4	\$ 914,339.34	\$ 1,532,974.76	\$ 480,500.34	\$ 4,271,361.64	\$ 689,904.55
5	\$ 901,971.47	\$ 1,510,757.74	\$ 473,536.57	\$ 4,213,584.77	\$ 679,932.60
6	\$ 889,770.89	\$ 1,488,862.70	\$ 466,673.72	\$ 4,156,589.42	\$ 670,104.78
7	\$ 877,735.34	\$ 1,467,284.98	\$ 459,910.33	\$ 4,100,365.02	\$ 660,419.01
8	\$ 865,862.59	\$ 1,446,019.98	\$ 453,244.96	\$ 4,044,901.15	\$ 650,873.25
9	\$ 854,150.44	\$ 1,425,063.16	\$ 446,676.20	\$ 3,990,187.51	\$ 641,465.46
10	\$ 842,596.72	\$ 1,404,410.08	\$ 440,202.63	\$ 3,936,213.96	\$ 632,193.65
11	\$ 831,199.27	\$ 1,384,056.31	\$ 433,822.88	\$ 3,882,970.49	\$ 623,055.85
12	\$ 819,956.00	\$ 1,363,997.52	\$ 427,535.59	\$ 3,830,447.21	\$ 614,050.14
13	\$ 808,864.80	\$ 1,344,229.44	\$ 421,339.42	\$ 3,778,634.40	\$ 605,174.59
14	\$ 797,923.64	\$ 1,324,747.85	\$ 415,233.05	\$ 3,727,522.44	\$ 596,427.33
15	\$ 787,130.47	\$ 1,305,548.61	\$ 409,215.18	\$ 3,677,101.84	\$ 587,806.51
16	\$ 776,483.29	\$ 1,286,627.61	\$ 403,284.53	\$ 3,627,363.27	\$ 579,310.29
17	\$ 765,980.14	\$ 1,267,980.84	\$ 397,439.83	\$ 3,578,297.49	\$ 570,936.88
18	\$ 755,619.05	\$ 1,249,604.30	\$ 391,679.83	\$ 3,529,895.39	\$ 562,684.50
19	\$ 745,398.12	\$ 1,231,494.10	\$ 386,003.31	\$ 3,482,148.02	\$ 554,551.40
20	\$ 735,315.44	\$ 1,213,646.36	\$ 380,409.06	\$ 3,435,046.50	\$ 546,535.85
21	\$ 725,369.14	\$ 1,196,057.28	\$ 374,895.88	\$ 3,388,582.10	\$ 538,636.16
22	\$ 715,557.39	\$ 1,178,723.11	\$ 369,462.61	\$ 3,342,746.21	\$ 530,850.66
23	\$ 705,878.35	\$ 1,161,640.17	\$ 364,108.08	\$ 3,297,530.32	\$ 523,177.69
24	\$ 696,330.24	\$ 1,144,804.81	\$ 358,831.15	\$ 3,252,926.04	\$ 515,615.62
25	\$ 686,911.28	\$ 1,128,213.43	\$ 353,630.70	\$ 3,208,925.11	\$ 508,162.86
26	\$ 677,619.72	\$ 1,111,862.51	\$ 348,505.62	\$ 3,165,519.36	\$ 500,817.82
27	\$ 668,453.85	\$ 1,095,748.56	\$ 343,454.81	\$ 3,122,700.74	\$ 493,578.94
28	\$ 659,411.96	\$ 1,079,868.15	\$ 338,477.20	\$ 3,080,461.31	\$ 486,444.70
29	\$ 650,492.38	\$ 1,064,217.89	\$ 333,571.74	\$ 3,038,793.23	\$ 479,413.58
30	\$ 641,693.45	\$ 1,048,794.44	\$ 328,737.36	\$ 2,997,688.78	\$ 472,484.08
31	\$ 633,013.54	\$ 1,033,594.52	\$ 323,973.06	\$ 2,957,140.34	\$ 465,654.75
32	\$ 624,451.04	\$ 1,018,614.89	\$ 319,277.79	\$ 2,917,140.37	\$ 458,924.13
33	\$ 616,004.36	\$ 1,003,852.35	\$ 314,650.58	\$ 2,877,681.47	\$ 452,290.79
34	\$ 607,671.93	\$ 989,303.77	\$ 310,090.43	\$ 2,838,756.31	\$ 445,753.33
35	\$ 599,452.21	\$ 974,966.03	\$ 305,596.36	\$ 2,800,357.67	\$ 439,310.36
36	\$ 591,343.68	\$ 960,836.09	\$ 301,167.43	\$ 2,762,478.44	\$ 432,960.52
37	\$ 583,344.83	\$ 946,910.93	\$ 296,802.68	\$ 2,725,111.58	\$ 426,702.47
38	\$ 575,454.18	\$ 933,187.58	\$ 292,501.20	\$ 2,688,250.17	\$ 420,534.86
39	\$ 567,670.25	\$ 919,663.13	\$ 288,262.05	\$ 2,651,887.36	\$ 414,456.41
40	\$ 559,991.62	\$ 906,334.67	\$ 284,084.34	\$ 2,616,016.42	\$ 408,465.81
41	\$ 552,416.86	\$ 893,199.39	\$ 279,967.17	\$ 2,580,630.69	\$ 402,561.80
42	\$ 544,944.55	\$ 880,254.47	\$ 275,909.68	\$ 2,545,723.61	\$ 396,743.13
43	\$ 537,573.32	\$ 867,497.16	\$ 271,910.99	\$ 2,511,288.70	\$ 391,008.56
44	\$ 530,301.80	\$ 854,924.74	\$ 267,970.25	\$ 2,477,319.58	\$ 385,356.88
45	\$ 523,128.63	\$ 842,534.52	\$ 264,086.62	\$ 2,443,809.94	\$ 379,786.90
46	\$ 516,052.50	\$ 830,323.88	\$ 260,259.28	\$ 2,410,753.58	\$ 374,297.41
47	\$ 509,072.08	\$ 818,290.20	\$ 256,487.40	\$ 2,378,144.35	\$ 368,887.28
48	\$ 502,186.08	\$ 806,430.92	\$ 252,770.20	\$ 2,345,976.21	\$ 363,555.34
49	\$ 495,393.22	\$ 794,743.52	\$ 249,106.86	\$ 2,314,243.20	\$ 358,300.48
50	\$ 488,692.25	\$ 783,225.49	\$ 245,496.62	\$ 2,282,939.43	\$ 353,121.56
Total =	\$ 34,788,398.80	\$ 57,251,442.68	\$ 17,945,068.84	\$ 162,514,971.32	\$ 25,791,177.92
		Goodfellow Total NPV =	\$298,291,059.56		

Table 32: Goodfellow AFB Status Quo Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.90 for Goodfellow AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.4.2. Goodfellow AFB Privatization

The Goodfellow AFB privatization estimate included BAH, Moves, Manpower, and Project Management. The complete estimate for the privatization alternative is shown in Table 33, and totaled \$874,153,526.12.

Goodfellow AFB Privatization			
BAH	Moves	Manpower	Proj Mgt
\$ 19,218,950.72	\$ 5,260,555.38	\$ 203,994.33	\$ 499,057.13
\$ 18,862,239.57	\$ 5,188,927.90	\$ 200,208.11	\$ 433,446.40
\$ 18,539,667.94	\$ 4,922,272.64	\$ 196,784.26	\$ 426,033.84
\$ 18,271,693.61	\$ 5,118,882.30	\$ 193,939.92	\$ 419,875.90
\$ 18,007,592.61	\$ 5,095,219.07	\$ 191,136.69	\$ 413,806.97
\$ 17,747,308.95	\$ 7,332,801.97	\$ 188,373.98	\$ 407,825.76
\$ 17,490,787.46	\$ 5,754,557.57	\$ 185,651.21	\$ 401,931.01
\$ 17,237,973.76	\$ 5,728,950.36	\$ 182,967.78	\$ 396,121.45
\$ 16,988,814.25	\$ 5,509,493.03	\$ 180,323.15	\$ 390,395.87
\$ 16,743,256.13	\$ 3,936,213.96	\$ 177,716.74	\$ 134,663.57
\$ 16,501,247.32	\$ 3,882,970.49	\$ 175,148.00	\$ 132,717.13
\$ 16,262,736.54	\$ 3,830,447.21	\$ 172,616.39	\$ 130,798.82
\$ 16,027,673.22	\$ 3,778,634.40	\$ 170,121.38	\$ 128,908.24
\$ 15,796,007.53	\$ 3,727,522.44	\$ 167,662.43	\$ 127,044.98
\$ 15,567,690.35	\$ 3,677,101.84	\$ 165,239.01	\$ 125,208.66
\$ 15,342,673.30	\$ 3,627,363.27	\$ 162,850.63	\$ 123,398.88
\$ 15,120,908.67	\$ 3,578,297.49	\$ 160,496.77	\$ 121,615.26
\$ 14,902,349.45	\$ 3,529,895.39	\$ 158,176.93	\$ 119,857.42
\$ 14,686,949.31	\$ 3,482,148.02	\$ 155,890.63	\$ 118,124.99
\$ 14,474,662.58	\$ 3,435,046.50	\$ 153,637.37	\$ 116,417.60
\$ 14,265,444.27	\$ 3,388,582.10	\$ 151,416.68	\$ 114,734.89
\$ 14,059,250.02	\$ 3,342,746.21	\$ 149,228.09	\$ 113,076.50
\$ 13,856,036.13	\$ 3,297,530.32	\$ 147,071.13	\$ 111,442.08
\$ 13,655,759.51	\$ 3,252,926.04	\$ 144,945.35	\$ 109,831.28
\$ 13,458,377.71	\$ 3,208,925.11	\$ 142,850.29	\$ 108,243.77
\$ 13,263,848.89	\$ 3,165,519.36	\$ 140,785.52	\$ 106,679.20
\$ 13,072,131.81	\$ 3,122,700.74	\$ 138,750.59	\$ 105,137.25
\$ 12,883,185.83	\$ 3,080,461.31	\$ 136,745.07	\$ 103,617.58
\$ 12,696,970.89	\$ 3,038,793.23	\$ 134,768.54	\$ 102,119.88
\$ 12,513,447.52	\$ 2,997,688.78	\$ 132,820.59	\$ 100,643.83
\$ 12,332,576.82	\$ 2,957,140.34	\$ 130,900.78	\$ 269,227.60
\$ 12,154,320.45	\$ 2,917,140.37	\$ 129,008.73	\$ 265,336.16
\$ 11,978,640.61	\$ 2,877,681.47	\$ 127,144.02	\$ 261,500.96
\$ 11,805,500.06	\$ 2,838,756.31	\$ 125,306.27	\$ 257,721.20
\$ 11,634,862.11	\$ 2,800,357.67	\$ 123,495.08	\$ 253,996.07
\$ 11,466,690.58	\$ 2,762,478.44	\$ 121,710.07	\$ 250,324.78
\$ 11,300,949.81	\$ 2,725,111.58	\$ 119,950.86	\$ 246,706.56
\$ 11,137,604.68	\$ 2,688,250.17	\$ 118,217.08	\$ 243,140.64
\$ 10,976,620.56	\$ 2,651,887.36	\$ 116,508.35	\$ 239,626.26
\$ 10,817,963.32	\$ 2,616,016.42	\$ 114,824.33	\$ 87,007.30
\$ 10,661,599.33	\$ 2,580,630.69	\$ 113,164.65	\$ 85,749.69
\$ 10,507,495.44	\$ 2,545,723.61	\$ 111,528.95	\$ 84,510.25
\$ 10,355,618.98	\$ 2,511,288.70	\$ 109,916.90	\$ 83,288.73
\$ 10,205,937.77	\$ 2,477,319.58	\$ 108,328.15	\$ 82,084.87
\$ 10,058,420.06	\$ 2,443,809.94	\$ 106,762.36	\$ 80,898.41
\$ 9,913,034.58	\$ 2,410,753.58	\$ 105,219.21	\$ 79,729.09
\$ 9,769,750.53	\$ 2,378,144.35	\$ 103,698.36	\$ 78,576.68
\$ 9,628,537.52	\$ 2,345,976.21	\$ 102,199.49	\$ 77,440.92
\$ 9,489,365.61	\$ 2,314,243.20	\$ 100,722.29	\$ 76,321.58
\$ 9,352,205.31	\$ 2,282,939.43	\$ 99,266.44	\$ 75,218.42
\$683,063,329.99	\$ 174,418,823.86	\$ 7,250,189.93	\$9,421,182.35
	Goodfellow Total NPV =	\$874,153,526.12	

Table 33: Goodfellow AFB Privatization Estimate

As previously discussed, Scoring is assumed to be zero in the cost estimate model to create the most conservative estimate possible. The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.90 for Goodfellow AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.4.3. Goodfellow AFB Identical FSRM

The Goodfellow AFB identical FSRM estimate included BAH, FSRM Renovation #1, O&M, Utilities, Moves, Manpower, and Out Year Renovation. The complete estimate for the identical FSRM alternative is shown in Table 34, and totaled \$399,071,799.31.

Goodfellow AFB Identical FSRM						
BAH	FSRM Reno 1	O&M	Utilities	Moves	Manpower	Out Year Reno
\$ 2,115,688.04	\$ 952,216.07	\$ 1,601,605.45	\$ 502,012.15	\$ 5,260,555.38	\$ 725,671.19	
\$ 2,114,225.04	\$ 969,363.33	\$ 1,578,393.78	\$ 494,736.62	\$ 5,188,927.90	\$ 712,202.45	
\$ 1,809,255.08	\$ 732,779.23	\$ 1,555,518.51	\$ 487,566.52	\$ 4,922,272.64	\$ 700,022.76	
\$ 2,182,494.61	\$ 1,053,864.01	\$ 1,532,974.76	\$ 480,500.34	\$ 5,118,882.30	\$ 689,904.55	
\$ 2,219,123.47	\$ 1,095,209.47	\$ 1,510,757.74	\$ 473,536.57	\$ 5,095,219.07	\$ 679,932.60	
\$ 5,633,859.96	\$ 3,941,782.87	\$ 1,488,862.70	\$ 466,673.72	\$ 7,332,801.97	\$ 670,104.78	
\$ 3,344,220.86	\$ 2,050,895.96	\$ 1,467,284.98	\$ 459,910.33	\$ 5,754,557.57	\$ 660,419.01	
\$ 3,373,791.63	\$ 2,085,867.80	\$ 1,446,019.98	\$ 453,244.96	\$ 5,728,950.36	\$ 650,873.25	
\$ 3,113,474.60	\$ 1,879,972.71	\$ 1,425,063.16	\$ 446,676.20	\$ 5,509,493.03	\$ 641,465.46	
\$ 837,162.81		\$ 1,404,410.08	\$ 440,202.63	\$ 3,936,213.96	\$ 632,193.65	
\$ 825,062.37		\$ 1,384,056.31	\$ 433,822.88	\$ 3,882,970.49	\$ 623,055.85	
\$ 813,136.83		\$ 1,363,997.52	\$ 427,535.59	\$ 3,830,447.21	\$ 614,050.14	
\$ 801,383.66		\$ 1,344,229.44	\$ 421,339.42	\$ 3,778,634.40	\$ 605,174.59	
\$ 789,800.38		\$ 1,324,747.85	\$ 415,233.05	\$ 3,727,522.44	\$ 596,427.33	
\$ 778,384.52		\$ 1,305,548.61	\$ 409,215.18	\$ 3,677,101.84	\$ 587,806.51	
\$ 767,133.67		\$ 1,286,627.61	\$ 403,284.53	\$ 3,627,363.27	\$ 579,310.29	
\$ 756,045.43		\$ 1,267,980.84	\$ 397,439.83	\$ 3,578,297.49	\$ 570,936.88	
\$ 745,117.47		\$ 1,249,604.30	\$ 391,679.83	\$ 3,529,895.39	\$ 562,684.50	
\$ 734,347.47		\$ 1,231,494.10	\$ 386,003.31	\$ 3,482,148.02	\$ 554,551.40	
\$ 723,733.13		\$ 1,213,646.36	\$ 380,409.06	\$ 3,435,046.50	\$ 546,535.85	
\$ 713,272.21		\$ 1,196,057.28	\$ 374,895.88	\$ 3,388,582.10	\$ 538,636.16	
\$ 702,962.50		\$ 1,178,723.11	\$ 369,462.61	\$ 3,342,746.21	\$ 530,850.66	
\$ 692,801.81		\$ 1,161,640.17	\$ 364,108.08	\$ 3,297,530.32	\$ 523,177.69	
\$ 682,787.98		\$ 1,144,804.81	\$ 358,831.15	\$ 3,252,926.04	\$ 515,615.62	
\$ 672,918.89		\$ 1,128,213.43	\$ 353,630.70	\$ 3,208,925.11	\$ 508,162.86	
\$ 663,192.44		\$ 1,111,862.51	\$ 348,505.62	\$ 3,165,519.36	\$ 500,817.82	
\$ 653,606.59		\$ 1,095,748.56	\$ 343,454.81	\$ 3,122,700.74	\$ 493,578.94	
\$ 644,159.29		\$ 1,079,868.15	\$ 338,477.20	\$ 3,080,461.31	\$ 486,444.70	
\$ 634,848.54		\$ 1,064,217.89	\$ 333,571.74	\$ 3,038,793.23	\$ 479,413.58	
\$ 625,672.38		\$ 1,048,794.44	\$ 328,737.36	\$ 2,997,688.78	\$ 472,484.08	
\$ 616,628.84		\$ 1,033,594.52	\$ 323,973.06	\$ 3,464,582.19	\$ 465,654.75	\$ 614,511.72
\$ 607,716.02		\$ 1,018,614.89	\$ 319,277.79	\$ 3,434,226.56	\$ 458,924.13	\$ 625,577.68
\$ 598,932.03		\$ 1,003,852.35	\$ 314,650.58	\$ 3,268,950.13	\$ 452,290.79	\$ 472,898.36
\$ 590,275.00		\$ 989,303.77	\$ 310,090.43	\$ 3,402,020.39	\$ 445,753.33	\$ 680,110.11
\$ 581,743.11		\$ 974,966.03	\$ 305,596.36	\$ 3,386,293.76	\$ 439,310.36	\$ 706,792.37
\$ 4,702,026.48		\$ 960,836.09	\$ 301,167.43	\$ 4,873,396.26	\$ 432,960.52	\$ 2,543,825.74
\$ 4,656,446.37		\$ 946,910.93	\$ 296,802.68	\$ 3,824,491.57	\$ 426,702.47	\$ 1,323,543.71
\$ 4,428,181.56		\$ 933,187.58	\$ 292,501.20	\$ 3,431,224.69	\$ 420,534.86	\$ 1,346,112.75
\$ 4,604,107.93		\$ 919,663.13	\$ 288,262.05	\$ 3,661,621.14	\$ 414,456.41	\$ 1,213,238.56
\$ 4,578,515.35		\$ 906,334.67	\$ 284,084.34	\$ 2,616,016.42	\$ 408,465.81	
\$ 6,582,990.53		\$ 893,199.39	\$ 279,967.17	\$ 2,580,630.69	\$ 402,561.80	
\$ 5,161,271.12		\$ 880,254.47	\$ 275,909.68	\$ 2,545,723.61	\$ 396,743.13	
\$ 5,133,472.67		\$ 867,497.16	\$ 271,910.99	\$ 2,511,288.70	\$ 391,008.56	
\$ 4,932,184.26		\$ 854,924.74	\$ 267,970.25	\$ 2,477,319.58	\$ 385,356.88	
\$ 502,921.00		\$ 842,534.52	\$ 264,086.62	\$ 2,443,809.94	\$ 379,786.90	
\$ 495,651.73		\$ 830,323.88	\$ 260,259.28	\$ 2,410,753.58	\$ 374,297.41	
\$ 488,487.53		\$ 818,290.20	\$ 256,487.40	\$ 2,378,144.35	\$ 368,887.28	
\$ 481,426.88		\$ 806,430.92	\$ 252,770.20	\$ 2,345,976.21	\$ 363,555.34	
\$ 474,468.28		\$ 794,743.52	\$ 249,106.86	\$ 2,314,243.20	\$ 358,300.48	
\$ 467,610.27		\$ 783,225.49	\$ 245,496.62	\$ 2,282,939.43	\$ 353,121.56	
\$ 91,848,720.60	\$ 14,761,951.45	\$ 57,251,442.68	\$ 17,945,068.84	\$ 181,946,826.84	\$ 25,791,177.92	\$ 9,526,610.99
		Goodfellow Total NPV =	\$ 399,071,799.31			

Table 34: Goodfellow AFB Identical FSRM Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.90 for Goodfellow AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.5. Keesler AFB Estimate

The Keesler AFB cost data comes from all O&M costs from the years 2008-2015. Table 35 shows the O&M costs per year as well as the average over that period.

Keesler Data	
Year	O&M Cost Data
2008	\$ 2,891,206.74
2009	\$ 1,745,062.68
2010	\$ 3,113,157.94
2011	\$ 6,215,362.81
2012	\$ 2,215,712.34
2013	\$ 1,090,827.73
2014	\$ 1,130,200.01
2015	\$ 7,721,921.27
Mean	\$ 3,265,431.44

Table 35: Keesler AFB O&M Cost Data

Within the O&M cost data, the facility number and square footage for each facility associated with each O&M is provided and utilized to determine the costs for Keesler AFB.

Table 36 details the Keesler AFB initial costs.

Base	Facility	SF	New Construction Cost	Demolition Cost	New Dorm Cost	Full Renovation Cost	PRSNL	BAH	Utilities
Keesler	2002	41119	\$ 7,867,709.46	\$ 1,192,451.00	\$ 9,060,160.46	\$ 6,342,112.32	116	\$ 1,526,151.95	\$ 33,306.39
	2003	41115	\$ 7,866,944.10	\$ 1,192,335.00	\$ 9,059,279.10	\$ 6,341,495.37	116	\$ 1,526,003.49	\$ 33,303.15
	2004	41119	\$ 7,867,709.46	\$ 1,192,451.00	\$ 9,060,160.46	\$ 6,342,112.32	116	\$ 1,526,151.95	\$ 33,306.39
	2503	31733	\$ 6,071,792.22	\$ 920,257.00	\$ 6,992,049.22	\$ 4,894,434.45	89	\$ 1,177,785.94	\$ 25,703.73
	2504	31733	\$ 6,071,792.22	\$ 920,257.00	\$ 6,992,049.22	\$ 4,894,434.45	89	\$ 1,177,785.94	\$ 25,703.73
	3821	50856	\$ 9,730,787.04	\$ 1,474,824.00	\$ 11,205,611.04	\$ 7,843,927.73	143	\$ 1,887,545.51	\$ 41,193.36
	4904	39742	\$ 7,604,234.28	\$ 1,152,518.00	\$ 8,756,752.28	\$ 6,129,726.60	112	\$ 1,475,043.92	\$ 32,191.02
	4908	47502	\$ 9,089,032.68	\$ 1,377,558.00	\$ 10,466,590.68	\$ 7,326,613.48	134	\$ 1,763,060.15	\$ 38,476.62
	5020	39841	\$ 7,623,176.94	\$ 1,155,389.00	\$ 8,778,565.94	\$ 6,144,996.16	112	\$ 1,478,718.35	\$ 32,271.21
	5022	47411	\$ 9,071,620.74	\$ 1,374,919.00	\$ 10,446,539.74	\$ 7,312,577.82	134	\$ 1,759,682.64	\$ 38,402.91
	6950	142122	\$ 27,193,623.48	\$ 4,121,538.00	\$ 31,315,161.48	\$ 21,920,613.04	400	\$ 5,274,928.09	\$ 115,118.82
	6955	142122	\$ 27,193,623.48	\$ 4,121,538.00	\$ 31,315,161.48	\$ 21,920,613.04	400	\$ 5,274,928.09	\$ 115,118.82
	6965	142122	\$ 27,193,623.48	\$ 4,121,538.00	\$ 31,315,161.48	\$ 21,920,613.04	400	\$ 5,274,928.09	\$ 115,118.82
	7315	142122	\$ 27,193,623.48	\$ 4,121,538.00	\$ 31,315,161.48	\$ 21,920,613.04	400	\$ 5,274,928.09	\$ 115,118.82
	7320	142122	\$ 27,193,623.48	\$ 4,121,538.00	\$ 31,315,161.48	\$ 21,920,613.04	400	\$ 5,274,928.09	\$ 115,118.82
	7404	142122	\$ 27,193,623.48	\$ 4,121,538.00	\$ 31,315,161.48	\$ 21,920,613.04	400	\$ 5,274,928.09	\$ 115,118.82
	7420	155264	\$ 29,708,213.76	\$ 4,502,656.00	\$ 34,210,869.76	\$ 23,947,608.83	437	\$ 5,762,699.90	\$ 125,763.84

Table 36: Keesler AFB Initial Costs

The new construction costs were determined by multiplying the square footage of each facility by the union dormitory per square footage cost of \$191.34 shown in Table 12 (RS Means, 2016). The Union price used to calculate the new construction costs was used based on the aforementioned assumption that the estimate should be as conservative as possible to ensure the integrity of the cost estimation model. The demolition price was calculated by multiplying the square footage by the average Air Force demolition cost of \$29.00 per square foot (UFC 3-730-01, 2011). The new construction cost was added to the demolition cost to determine the complete cost to construct a new dormitory. Since no new construction will be occurring in any phase (status quo, privatization, or identical FSRM), the full renovation cost is calculated by multiplying the new dorm cost by 70%. The 70% is the estimated cost for full renovation used by all accompanied housing privatization estimates, which drives its use in this model (AETC Group I, 2005). With the number of personnel in each existing dormitory not available, the number of personnel is determined by dividing the actual square footage of each facility by 355

square foot per person to accommodate the Dorms-4-Airmen construct (AFUHDG, 2016). BAH is determined by multiplying the number of personnel by the BAH rate for Keesler AFB, which is \$1,098.00 per month or \$13,176.00 per year. Finally, the initial utilities costs are calculated by multiplying the facility square footage by the \$0.81 per square foot historical average for federal dormitories (DOE, 2016).

The initial Manpower calculation for Keesler AFB is shown in Table 37.

Keesler									
Grade Housing Office	Base Pay	Approx Benefits (32.85%)*	STATUS QUO		IDENTICAL FSRM		PRIVATIZATION		Military Grade Equivalent
			Positions	Funding	Positions	Funding	Positions	Funding	
GS-11/7	\$ 63,337.00	\$ 20,806.20	1	\$ 84,143.20	1	\$ 84,143.20	1	\$ 84,143.20	O-3
GS-9/10	\$ 56,706.00	\$ 18,627.92	1	\$ 75,333.92	1	\$ 75,333.92	1	\$ 75,333.92	O-2
GS-9/8	\$ 53,799.00	\$ 17,672.97	1	\$ 71,471.97	1	\$ 71,471.97	1	\$ 71,471.97	O-1
GS-7/10	\$ 46,362.00	\$ 15,229.92	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/9	\$ 45,173.00	\$ 14,839.33	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/5	\$ 40,418.00	\$ 13,277.31	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/4	\$ 39,229.00	\$ 12,886.73	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/3	\$ 38,040.00	\$ 12,496.14	4	\$ 202,144.56	4	\$ 202,144.56	0	\$ -	E-7
GS-5/8	\$ 35,512.00	\$ 11,665.69	8	\$ 377,421.54	8	\$ 377,421.54	0	\$ -	E-6
GS-4/4	\$ 28,305.00	\$ 9,298.19	16	\$ 601,651.08	16	\$ 601,651.08	0	\$ -	E-5
			31	\$ 1,412,166.27	31	\$ 1,412,166.27		\$ 230,949.10	

Table 37: Keesler AFB Manpower Initial Costs

The number of personnel in the status quo and identical FSRM alternatives are based on the allotted personnel per number of individuals living in unaccompanied housing per installation. Keesler AFB has 4,000 individuals occupying unaccompanied housing units, which earns one GS-11/7, one GS-9/10, one GS-9/8, four Air Force Master Sergeants, eight Air Force Technical Sergeants and 16 Air Force Staff Sergeants (AFI 32-6005, 2013). In the privatization alternative, only Flight leadership will be retained to run the Asset Management Flight, which includes one GS-11/7, one GS-9/10, and one GS-9/8. The Keesler AFB initial costs combined with the Keesler AFB manpower initial cost

calculations provide the basis for each calculation in the status quo, privatization, and identical FSRM alternative.

4.2.5.1. Keesler AFB Status Quo

The Keesler AFB status quo estimate included BAH, O&M, Utilities, Moves, and Manpower. The complete estimate for the status quo alternative is shown in Table 38, and totaled \$610,336,702.82.

Keesler AFB Status Quo					
Year	BAH	O&M	Utilities	Moves	Manpower
1	\$ 2,587,128.57	\$ 2,869,272.26	\$ 1,010,777.64	\$ 9,246,000.10	\$ 1,219,629.20
2	\$ 2,539,635.39	\$ 2,827,688.61	\$ 996,128.69	\$ 9,076,266.77	\$ 1,196,992.41
3	\$ 2,496,694.70	\$ 2,786,707.61	\$ 981,692.04	\$ 8,922,803.32	\$ 1,176,522.11
4	\$ 2,461,113.78	\$ 2,746,320.54	\$ 967,464.62	\$ 8,795,642.60	\$ 1,159,516.53
5	\$ 2,427,823.35	\$ 2,706,518.80	\$ 953,443.39	\$ 8,676,667.72	\$ 1,142,756.76
6	\$ 2,394,983.23	\$ 2,667,293.89	\$ 939,625.37	\$ 8,559,302.17	\$ 1,126,239.23
7	\$ 2,362,587.32	\$ 2,628,637.45	\$ 926,007.61	\$ 8,443,524.17	\$ 1,109,960.45
8	\$ 2,330,629.62	\$ 2,590,541.26	\$ 912,587.21	\$ 8,329,312.25	\$ 1,093,916.96
9	\$ 2,299,104.19	\$ 2,552,997.18	\$ 899,361.31	\$ 8,216,645.22	\$ 1,078,105.37
10	\$ 2,268,005.20	\$ 2,515,997.22	\$ 886,327.09	\$ 8,105,502.19	\$ 1,062,522.32
11	\$ 2,237,326.87	\$ 2,479,533.50	\$ 873,481.77	\$ 7,995,862.55	\$ 1,047,164.51
12	\$ 2,207,063.51	\$ 2,443,598.23	\$ 860,822.61	\$ 7,887,705.96	\$ 1,032,028.68
13	\$ 2,177,209.51	\$ 2,408,183.76	\$ 848,346.92	\$ 7,781,012.35	\$ 1,017,111.63
14	\$ 2,147,759.33	\$ 2,373,282.55	\$ 836,052.04	\$ 7,675,761.94	\$ 1,002,410.19
15	\$ 2,118,707.52	\$ 2,338,887.15	\$ 823,935.34	\$ 7,571,935.21	\$ 987,921.25
16	\$ 2,090,048.67	\$ 2,304,990.23	\$ 811,994.25	\$ 7,469,512.90	\$ 973,641.73
17	\$ 2,061,777.48	\$ 2,271,584.58	\$ 800,226.22	\$ 7,368,476.01	\$ 959,568.61
18	\$ 2,033,888.70	\$ 2,238,663.06	\$ 788,628.74	\$ 7,268,805.80	\$ 945,698.90
19	\$ 2,006,377.17	\$ 2,206,218.67	\$ 777,199.34	\$ 7,170,483.79	\$ 932,029.67
20	\$ 1,979,237.77	\$ 2,174,244.49	\$ 765,935.58	\$ 7,073,491.74	\$ 918,558.01
21	\$ 1,952,465.47	\$ 2,142,733.70	\$ 754,835.06	\$ 6,977,811.66	\$ 905,281.08
22	\$ 1,926,055.31	\$ 2,111,679.58	\$ 743,895.42	\$ 6,883,425.80	\$ 892,196.05
23	\$ 1,900,002.38	\$ 2,081,075.53	\$ 733,114.33	\$ 6,790,316.66	\$ 879,300.15
24	\$ 1,874,301.87	\$ 2,050,915.02	\$ 722,489.49	\$ 6,698,466.96	\$ 866,590.66
25	\$ 1,848,948.99	\$ 2,021,191.61	\$ 712,018.62	\$ 6,607,859.68	\$ 854,064.86
26	\$ 1,823,939.06	\$ 1,991,898.98	\$ 701,699.51	\$ 6,518,478.00	\$ 841,720.12
27	\$ 1,799,267.42	\$ 1,963,030.88	\$ 691,529.95	\$ 6,430,305.35	\$ 829,553.81
28	\$ 1,774,929.50	\$ 1,934,581.16	\$ 681,507.78	\$ 6,343,325.38	\$ 817,563.35
29	\$ 1,750,920.79	\$ 1,906,543.75	\$ 671,630.86	\$ 6,257,521.94	\$ 805,746.20
30	\$ 1,727,236.84	\$ 1,878,912.68	\$ 661,897.08	\$ 6,172,879.13	\$ 794,099.86
31	\$ 1,703,873.25	\$ 1,851,682.06	\$ 652,304.37	\$ 6,089,381.25	\$ 782,621.85
32	\$ 1,680,825.69	\$ 1,824,846.09	\$ 642,850.68	\$ 6,007,012.81	\$ 771,309.75
33	\$ 1,658,089.88	\$ 1,798,399.04	\$ 633,534.00	\$ 5,925,758.53	\$ 760,161.16
34	\$ 1,635,661.61	\$ 1,772,335.29	\$ 624,352.35	\$ 5,845,603.34	\$ 749,173.71
35	\$ 1,613,536.72	\$ 1,746,649.27	\$ 615,303.77	\$ 5,766,532.38	\$ 738,345.07
36	\$ 1,591,711.10	\$ 1,721,335.51	\$ 606,386.32	\$ 5,688,530.98	\$ 727,672.96
37	\$ 1,570,180.71	\$ 1,696,388.62	\$ 597,598.11	\$ 5,611,584.66	\$ 717,155.09
38	\$ 1,548,941.55	\$ 1,671,803.28	\$ 588,937.27	\$ 5,535,679.17	\$ 706,789.26
39	\$ 1,527,989.69	\$ 1,647,574.25	\$ 580,401.95	\$ 5,460,800.42	\$ 696,573.25
40	\$ 1,507,321.23	\$ 1,623,696.36	\$ 571,990.32	\$ 5,386,934.52	\$ 686,504.91
41	\$ 1,486,932.34	\$ 1,600,164.53	\$ 563,700.61	\$ 5,314,067.77	\$ 676,582.09
42	\$ 1,466,819.25	\$ 1,576,973.74	\$ 555,531.04	\$ 5,242,186.66	\$ 666,802.70
43	\$ 1,446,978.21	\$ 1,554,119.04	\$ 547,479.86	\$ 5,171,277.86	\$ 657,164.67
44	\$ 1,427,405.56	\$ 1,531,595.58	\$ 539,545.37	\$ 5,101,328.20	\$ 647,665.94
45	\$ 1,408,097.66	\$ 1,509,398.54	\$ 531,725.87	\$ 5,032,324.73	\$ 638,304.51
46	\$ 1,389,050.93	\$ 1,487,523.20	\$ 524,019.70	\$ 4,964,254.64	\$ 629,078.38
47	\$ 1,370,261.83	\$ 1,465,964.89	\$ 516,425.21	\$ 4,897,105.30	\$ 619,985.62
48	\$ 1,351,726.89	\$ 1,444,719.03	\$ 508,940.79	\$ 4,830,864.26	\$ 611,024.28
49	\$ 1,333,442.66	\$ 1,423,781.07	\$ 501,564.83	\$ 4,765,519.24	\$ 602,192.47
50	\$ 1,315,405.76	\$ 1,403,146.56	\$ 494,295.78	\$ 4,701,058.11	\$ 593,488.32
Total =	\$ 93,639,422.03	\$ 102,565,819.86	\$ 36,131,544.10	\$ 334,652,910.15	\$ 43,347,006.67
		Keesler Total NPV =	\$ 610,336,702.82		

Table 38: Keesler AFB Status Quo Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.88 for Keesler AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.5.2. Keesler AFB Privatization

The Keesler AFB privatization estimate included BAH, Moves, Manpower, and Project Management. The complete estimate for the privatization alternative is shown in Table 39, and totaled \$2,214,007,585.97.

Keesler AFB Privatization			
BAH	Moves	Manpower	Proj Mgt
\$ 51,731,367.36	\$ 10,775,670.45	\$ 199,461.12	\$ 487,966.97
\$ 50,771,213.19	\$ 10,406,541.28	\$ 195,759.04	\$ 423,814.26
\$ 49,902,951.86	\$ 10,405,376.25	\$ 192,411.28	\$ 416,566.42
\$ 49,181,649.29	\$ 10,339,459.11	\$ 189,630.15	\$ 410,545.33
\$ 48,470,772.51	\$ 10,199,741.34	\$ 186,889.21	\$ 404,611.26
\$ 47,770,170.81	\$ 13,453,958.49	\$ 184,187.90	\$ 398,762.97
\$ 47,079,695.68	\$ 13,271,972.58	\$ 181,525.62	\$ 392,999.21
\$ 46,399,200.76	\$ 13,092,448.31	\$ 178,901.83	\$ 387,318.75
\$ 45,728,541.78	\$ 10,783,243.18	\$ 176,315.97	\$ 381,720.41
\$ 45,067,576.57	\$ 8,105,502.19	\$ 173,767.48	\$ 131,671.04
\$ 44,416,165.03	\$ 7,995,862.55	\$ 171,255.82	\$ 129,767.86
\$ 43,774,169.06	\$ 7,887,705.96	\$ 168,780.47	\$ 127,892.18
\$ 43,141,452.57	\$ 7,781,012.35	\$ 166,340.90	\$ 126,043.61
\$ 42,517,881.43	\$ 7,675,761.94	\$ 163,936.59	\$ 124,221.76
\$ 41,903,323.45	\$ 7,571,935.21	\$ 161,567.04	\$ 122,426.25
\$ 41,297,648.36	\$ 7,469,512.90	\$ 159,231.73	\$ 120,656.69
\$ 40,700,727.76	\$ 7,368,476.01	\$ 156,930.18	\$ 118,912.70
\$ 40,112,435.12	\$ 7,268,805.80	\$ 154,661.89	\$ 117,193.92
\$ 39,532,645.72	\$ 7,170,483.79	\$ 152,426.39	\$ 115,499.99
\$ 38,961,236.66	\$ 7,073,491.74	\$ 150,223.21	\$ 113,830.54
\$ 38,398,086.80	\$ 6,977,811.66	\$ 148,051.86	\$ 112,185.22
\$ 37,843,076.77	\$ 6,883,425.80	\$ 145,911.91	\$ 110,563.69
\$ 37,296,088.92	\$ 6,790,316.66	\$ 143,802.88	\$ 108,965.59
\$ 36,757,007.29	\$ 6,698,466.96	\$ 141,724.34	\$ 107,390.59
\$ 36,225,717.60	\$ 6,607,859.68	\$ 139,675.84	\$ 105,838.35
\$ 35,702,107.22	\$ 6,518,478.00	\$ 137,656.95	\$ 104,308.55
\$ 35,186,065.17	\$ 6,430,305.35	\$ 135,667.24	\$ 102,800.87
\$ 34,677,482.05	\$ 6,343,325.38	\$ 133,706.29	\$ 101,314.97
\$ 34,176,250.04	\$ 6,257,521.94	\$ 131,773.69	\$ 99,850.55
\$ 33,682,262.89	\$ 6,172,879.13	\$ 129,869.02	\$ 98,407.30
\$ 33,195,415.88	\$ 6,089,381.25	\$ 127,991.88	\$ 263,244.77
\$ 32,715,605.81	\$ 6,007,012.81	\$ 126,141.87	\$ 259,439.80
\$ 32,242,730.97	\$ 5,925,758.53	\$ 124,318.60	\$ 255,689.83
\$ 31,776,691.11	\$ 5,845,603.34	\$ 122,521.69	\$ 251,994.06
\$ 31,317,387.43	\$ 5,766,532.38	\$ 120,750.74	\$ 248,351.71
\$ 30,864,722.59	\$ 5,688,530.98	\$ 119,005.40	\$ 244,762.01
\$ 30,418,600.61	\$ 5,611,584.66	\$ 117,285.28	\$ 241,224.19
\$ 29,978,926.92	\$ 5,535,679.17	\$ 115,590.03	\$ 237,737.51
\$ 29,545,608.33	\$ 5,460,800.42	\$ 113,919.28	\$ 234,301.23
\$ 29,118,552.96	\$ 5,386,934.52	\$ 112,272.68	\$ 85,073.81
\$ 28,697,670.30	\$ 5,314,067.77	\$ 110,649.88	\$ 83,844.14
\$ 28,282,871.13	\$ 5,242,186.66	\$ 109,050.53	\$ 82,632.25
\$ 27,874,067.50	\$ 5,171,277.86	\$ 107,474.30	\$ 81,437.87
\$ 27,471,172.77	\$ 5,101,328.20	\$ 105,920.86	\$ 80,260.76
\$ 27,074,101.52	\$ 5,032,324.73	\$ 104,389.87	\$ 79,100.66
\$ 26,682,769.58	\$ 4,964,254.64	\$ 102,881.00	\$ 77,957.33
\$ 26,297,093.99	\$ 4,897,105.30	\$ 101,393.95	\$ 76,830.53
\$ 25,916,993.00	\$ 4,830,864.26	\$ 99,928.39	\$ 75,720.01
\$ 25,542,386.03	\$ 4,765,519.24	\$ 98,484.02	\$ 74,625.55
\$ 25,173,193.66	\$ 4,701,058.11	\$ 97,060.52	\$ 73,546.90
\$ 1,838,591,531.80	\$ 359,115,156.84	\$ 7,089,074.59	\$ 9,211,822.74
	Keesler Total NPV =	\$ 2,214,007,585.97	

Table 39: Keesler AFB Privatization Estimate

As previously discussed, Scoring is assumed to be zero in the cost estimate model to create the most conservative estimate possible. The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.88 for Keesler AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.5.3. Keesler AFB Identical FSRM

The Keesler AFB identical FSRM estimate included BAH, FSRM Renovation #1, O&M, Utilities, Moves, Manpower, and Out Year Renovation. The complete estimate for the identical FSRM alternative is shown in Table 40, and totaled \$853,264,922.84.

Keesler AFB Identical FSRM						
BAH	FSRM Reno 1	O&M	Utilities	Moves	Manpower	Out Year Reno
\$ 5,583,254.11	\$ 1,848,444.89	\$ 2,869,272.26	\$ 1,010,777.64	\$ 10,775,670.45	\$ 1,219,629.20	
\$ 5,145,209.49	\$ 1,613,824.83	\$ 2,827,688.61	\$ 996,128.69	\$ 10,406,541.28	\$ 1,196,992.41	
\$ 5,397,225.23	\$ 1,803,005.05	\$ 2,786,707.61	\$ 981,692.04	\$ 10,405,376.25	\$ 1,176,522.11	
\$ 5,480,419.96	\$ 1,877,025.30	\$ 2,746,320.54	\$ 967,464.62	\$ 10,339,459.11	\$ 1,159,516.53	
\$ 5,401,478.43	\$ 1,849,991.66	\$ 2,706,518.80	\$ 953,443.39	\$ 10,199,741.34	\$ 1,142,756.76	
\$ 11,949,626.66	\$ 5,939,440.10	\$ 2,667,293.89	\$ 939,625.37	\$ 13,453,958.49	\$ 1,126,239.23	
\$ 11,776,905.48	\$ 5,853,361.26	\$ 2,628,637.45	\$ 926,007.61	\$ 13,271,972.58	\$ 1,109,960.45	
\$ 11,606,680.84	\$ 5,768,529.94	\$ 2,590,541.26	\$ 912,587.21	\$ 13,092,448.31	\$ 1,093,916.96	
\$ 7,285,836.53	\$ 3,105,306.25	\$ 2,552,997.18	\$ 899,361.31	\$ 10,783,243.18	\$ 1,078,105.37	
\$ 2,253,378.83		\$ 2,515,997.22	\$ 886,327.09	\$ 8,105,502.19	\$ 1,062,522.32	
\$ 2,220,808.25		\$ 2,479,533.50	\$ 873,481.77	\$ 7,995,862.55	\$ 1,047,164.51	
\$ 2,188,708.45		\$ 2,443,598.23	\$ 860,822.61	\$ 7,887,705.96	\$ 1,032,028.68	
\$ 2,157,072.63		\$ 2,408,183.76	\$ 848,346.92	\$ 7,781,012.35	\$ 1,017,111.63	
\$ 2,125,894.07		\$ 2,373,282.55	\$ 836,052.04	\$ 7,675,761.94	\$ 1,002,410.19	
\$ 2,095,166.17		\$ 2,338,887.15	\$ 823,935.34	\$ 7,571,935.21	\$ 987,921.25	
\$ 2,064,882.42		\$ 2,304,990.23	\$ 811,994.25	\$ 7,469,512.90	\$ 973,641.73	
\$ 2,035,036.39		\$ 2,271,584.58	\$ 800,226.22	\$ 7,368,476.01	\$ 959,568.61	
\$ 2,005,621.76		\$ 2,238,663.06	\$ 788,628.74	\$ 7,268,805.80	\$ 945,698.90	
\$ 1,976,632.29		\$ 2,206,218.67	\$ 777,199.34	\$ 7,170,483.79	\$ 932,029.67	
\$ 1,948,061.83		\$ 2,174,244.49	\$ 765,935.58	\$ 7,073,491.74	\$ 918,558.01	
\$ 1,919,904.34		\$ 2,142,733.70	\$ 754,835.06	\$ 6,977,811.66	\$ 905,281.08	
\$ 1,892,153.84		\$ 2,111,679.58	\$ 743,895.42	\$ 6,883,425.80	\$ 892,196.05	
\$ 1,864,804.45		\$ 2,081,075.53	\$ 733,114.33	\$ 6,790,316.66	\$ 879,300.15	
\$ 1,837,850.36		\$ 2,050,915.02	\$ 722,489.49	\$ 6,698,466.96	\$ 866,590.66	
\$ 1,811,285.88		\$ 2,021,191.61	\$ 712,018.62	\$ 6,607,859.68	\$ 854,064.86	
\$ 1,785,105.36		\$ 1,991,898.98	\$ 701,699.51	\$ 6,518,478.00	\$ 841,720.12	
\$ 1,759,303.26		\$ 1,963,030.88	\$ 691,529.95	\$ 6,430,305.35	\$ 829,553.81	
\$ 1,733,874.10		\$ 1,934,581.16	\$ 681,507.78	\$ 6,343,325.38	\$ 817,563.35	
\$ 1,708,812.50		\$ 1,906,543.75	\$ 671,630.86	\$ 6,257,521.94	\$ 805,746.20	
\$ 1,684,113.14		\$ 1,878,912.68	\$ 661,897.08	\$ 6,172,879.13	\$ 794,099.86	
\$ 1,659,770.79		\$ 1,851,682.06	\$ 652,304.37	\$ 7,096,816.45	\$ 782,621.85	\$ 1,192,892.11
\$ 1,635,780.29		\$ 1,824,846.09	\$ 642,850.68	\$ 6,887,438.24	\$ 771,309.75	\$ 1,041,480.28
\$ 1,612,136.55		\$ 1,798,399.04	\$ 633,534.00	\$ 6,910,355.96	\$ 760,161.16	\$ 1,163,567.55
\$ 1,588,834.56		\$ 1,772,335.29	\$ 624,352.35	\$ 6,871,627.18	\$ 749,173.71	\$ 1,211,336.45
\$ 1,565,869.37		\$ 1,746,649.27	\$ 615,303.77	\$ 6,778,770.44	\$ 738,345.07	\$ 1,193,890.31
\$ 12,589,857.93		\$ 1,721,335.51	\$ 606,386.32	\$ 8,941,530.29	\$ 727,672.96	\$ 3,833,011.89
\$ 12,206,929.44		\$ 1,696,388.62	\$ 597,598.11	\$ 8,820,582.06	\$ 717,155.09	\$ 3,777,460.99
\$ 12,236,031.78		\$ 1,671,803.28	\$ 588,937.27	\$ 8,701,269.84	\$ 706,789.26	\$ 3,722,715.18
\$ 12,156,014.98		\$ 1,647,574.25	\$ 580,401.95	\$ 7,166,567.05	\$ 696,573.25	\$ 2,004,006.36
\$ 11,980,474.68		\$ 1,623,696.36	\$ 571,990.32	\$ 5,386,934.52	\$ 686,504.91	
\$ 15,787,974.31		\$ 1,600,164.53	\$ 563,700.61	\$ 5,314,067.77	\$ 676,582.09	
\$ 15,559,773.26		\$ 1,576,973.74	\$ 555,531.04	\$ 5,242,186.66	\$ 666,802.70	
\$ 15,334,870.64		\$ 1,554,119.04	\$ 547,479.86	\$ 5,171,277.86	\$ 657,164.67	
\$ 12,618,278.50		\$ 1,531,595.58	\$ 539,545.37	\$ 5,101,328.20	\$ 647,665.94	
\$ 1,353,705.08		\$ 1,509,398.54	\$ 531,725.87	\$ 5,032,324.73	\$ 638,304.51	
\$ 1,334,138.48		\$ 1,487,523.20	\$ 524,019.70	\$ 4,964,254.64	\$ 629,078.38	
\$ 1,314,854.70		\$ 1,465,964.89	\$ 516,425.21	\$ 4,897,105.30	\$ 619,985.62	
\$ 1,295,849.65		\$ 1,444,719.03	\$ 508,940.79	\$ 4,830,864.26	\$ 611,024.28	
\$ 1,277,119.30		\$ 1,423,781.07	\$ 501,564.83	\$ 4,765,519.24	\$ 602,192.47	
\$ 1,258,659.68		\$ 1,403,146.56	\$ 494,295.78	\$ 4,701,058.11	\$ 593,488.32	
\$ 247,062,031.03	\$ 29,658,929.26	\$ 102,565,819.86	\$ 36,131,544.10	\$ 375,359,230.80	\$ 43,347,006.67	\$ 19,140,361.12
		Keesler Total NPV =	\$ 853,264,922.84			

Table 40: Keesler AFB Identical FSRM Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.88 for Keesler AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.6. JBSA-Lackland Estimate

The JBSA-Lackland cost data comes from all O&M costs from the years 2008-2015. Table 41 shows the O&M costs per year as well as the average over that period.

Lackland Data	
Year	O&M Cost Data
2008	\$ 2,328,768.91
2009	\$ 693,789.32
2010	\$ 2,253,770.36
2011	\$ 9,183,285.15
2012	\$ 12,543,304.69
2013	\$ 2,884,399.59
2014	\$ 22,302,925.26
2015	\$ 2,891,916.31
Mean	\$ 6,885,269.95

Table 41: JBSA-Lackland O&M Cost Data

Within the O&M cost data, the facility number and square footage for each facility associated with each O&M is provided and utilized to determine the costs for JBSA-Lackland. Table 42 details the JBSA-Lackland initial costs.

Base	Facility	SF	New Construction Cost	Demolition Cost	New Dorm Cost	Full Renovation Cost	PRSNL	BAH	Utilities
Lackland	1209	24522	\$ 4,692,039.48	\$ 711,138.00	\$ 5,403,177.48	\$ 3,782,224.24	69	\$ 942,473.71	\$ 19,862.82
	1212	36960	\$ 7,071,926.40	\$ 1,071,840.00	\$ 8,143,766.40	\$ 5,700,636.48	104	\$ 1,420,513.35	\$ 29,937.60
	1215	36935	\$ 7,067,142.90	\$ 1,071,115.00	\$ 8,138,257.90	\$ 5,696,780.53	104	\$ 1,419,552.51	\$ 29,917.35
	1217	36935	\$ 7,067,142.90	\$ 1,071,115.00	\$ 8,138,257.90	\$ 5,696,780.53	104	\$ 1,419,552.51	\$ 29,917.35
	1219	36935	\$ 7,067,142.90	\$ 1,071,115.00	\$ 8,138,257.90	\$ 5,696,780.53	104	\$ 1,419,552.51	\$ 29,917.35
	1400	28831	\$ 5,516,523.54	\$ 836,099.00	\$ 6,352,622.54	\$ 4,446,835.78	81	\$ 1,108,084.97	\$ 23,353.11
	1405	28831	\$ 5,516,523.54	\$ 836,099.00	\$ 6,352,622.54	\$ 4,446,835.78	81	\$ 1,108,084.97	\$ 23,353.11
	1410	28831	\$ 5,516,523.54	\$ 836,099.00	\$ 6,352,622.54	\$ 4,446,835.78	81	\$ 1,108,084.97	\$ 23,353.11
	5570	179549	\$ 34,354,905.66	\$ 5,206,921.00	\$ 39,561,826.66	\$ 27,693,278.66	506	\$ 6,900,750.86	\$ 145,434.69
	7065	210190	\$ 40,217,754.60	\$ 6,095,510.00	\$ 46,313,264.60	\$ 32,419,285.22	592	\$ 8,078,401.01	\$ 170,253.90
	7357	13839	\$ 2,647,954.26	\$ 401,331.00	\$ 3,049,285.26	\$ 2,134,499.68	39	\$ 531,885.40	\$ 11,209.59
	7358	13839	\$ 2,647,954.26	\$ 401,331.00	\$ 3,049,285.26	\$ 2,134,499.68	39	\$ 531,885.40	\$ 11,209.59
	7435	57558	\$ 11,013,147.72	\$ 1,669,182.00	\$ 12,682,329.72	\$ 8,877,630.80	162	\$ 2,212,172.82	\$ 46,621.98
	7436	57558	\$ 11,013,147.72	\$ 1,669,182.00	\$ 12,682,329.72	\$ 8,877,630.80	162	\$ 2,212,172.82	\$ 46,621.98
	7448	12930	\$ 2,474,026.20	\$ 374,970.00	\$ 2,848,996.20	\$ 1,994,297.34	36	\$ 496,949.07	\$ 10,473.30
	7460	67100	\$ 12,838,914.00	\$ 1,945,900.00	\$ 14,784,814.00	\$ 10,349,369.80	189	\$ 2,578,908.17	\$ 54,351.00
	9085	184911	\$ 35,380,870.74	\$ 5,362,419.00	\$ 40,743,289.74	\$ 28,520,302.82	521	\$ 7,106,832.91	\$ 149,777.91
	9110	215824	\$ 41,295,764.16	\$ 6,258,896.00	\$ 47,554,660.16	\$ 33,288,262.11	608	\$ 8,294,937.06	\$ 174,817.44
	9210	215824	\$ 41,295,764.16	\$ 6,258,896.00	\$ 47,554,660.16	\$ 33,288,262.11	608	\$ 8,294,937.06	\$ 174,817.44
	9310	215824	\$ 41,295,764.16	\$ 6,258,896.00	\$ 47,554,660.16	\$ 33,288,262.11	608	\$ 8,294,937.06	\$ 174,817.44
	9410	186024	\$ 35,593,832.16	\$ 5,394,696.00	\$ 40,988,528.16	\$ 28,691,969.71	524	\$ 7,149,609.74	\$ 150,679.44
	10050	32778	\$ 6,271,742.52	\$ 950,562.00	\$ 7,222,304.52	\$ 5,055,613.16	92	\$ 1,259,783.19	\$ 26,550.18
	10070	32778	\$ 6,271,742.52	\$ 950,562.00	\$ 7,222,304.52	\$ 5,055,613.16	92	\$ 1,259,783.19	\$ 26,550.18
	10075	32778	\$ 6,271,742.52	\$ 950,562.00	\$ 7,222,304.52	\$ 5,055,613.16	92	\$ 1,259,783.19	\$ 26,550.18
	10201	40523	\$ 7,753,670.82	\$ 1,175,167.00	\$ 8,928,837.82	\$ 6,250,186.47	114	\$ 1,557,452.99	\$ 32,823.63
	10205	25451	\$ 4,869,794.34	\$ 738,079.00	\$ 5,607,873.34	\$ 3,925,511.34	72	\$ 978,178.72	\$ 20,615.31
	10207	119134	\$ 22,795,099.56	\$ 3,454,886.00	\$ 26,249,985.56	\$ 18,374,989.89	336	\$ 4,578,772.66	\$ 96,498.54
	10251	47705	\$ 9,127,874.70	\$ 1,383,445.00	\$ 10,511,319.70	\$ 7,357,923.79	134	\$ 1,833,484.56	\$ 38,641.05
	10255	47705	\$ 9,127,874.70	\$ 1,383,445.00	\$ 10,511,319.70	\$ 7,357,923.79	134	\$ 1,833,484.56	\$ 38,641.05
	10261	43806	\$ 8,381,840.04	\$ 1,270,374.00	\$ 9,652,214.04	\$ 6,756,549.83	123	\$ 1,683,631.17	\$ 35,482.86
	10265	43806	\$ 8,381,840.04	\$ 1,270,374.00	\$ 9,652,214.04	\$ 6,756,549.83	123	\$ 1,683,631.17	\$ 35,482.86
	10380	24921	\$ 4,768,384.14	\$ 722,709.00	\$ 5,491,093.14	\$ 3,843,765.20	70	\$ 957,808.80	\$ 20,186.01
	10385	27384	\$ 5,239,654.56	\$ 794,136.00	\$ 6,033,790.56	\$ 4,223,653.39	77	\$ 1,052,471.26	\$ 22,181.04
	10395	20460	\$ 3,914,816.40	\$ 593,340.00	\$ 4,508,156.40	\$ 3,155,709.48	58	\$ 786,355.61	\$ 16,572.60
	10416	215824	\$ 41,295,764.16	\$ 6,258,896.00	\$ 47,554,660.16	\$ 33,288,262.11	608	\$ 8,294,937.06	\$ 174,817.44
	10504	165841	\$ 31,732,016.94	\$ 4,809,389.00	\$ 36,541,405.94	\$ 25,578,984.16	467	\$ 6,373,900.29	\$ 134,331.21
	10534	45060	\$ 8,621,780.40	\$ 1,306,740.00	\$ 9,928,520.40	\$ 6,949,964.28	127	\$ 1,731,827.15	\$ 36,498.60
	10540	19170	\$ 3,667,987.80	\$ 555,930.00	\$ 4,223,917.80	\$ 2,956,742.46	54	\$ 736,776.00	\$ 15,527.70
	10547	35433	\$ 6,779,750.22	\$ 1,027,557.00	\$ 7,807,307.22	\$ 5,465,115.05	100	\$ 1,361,824.94	\$ 28,700.73
	10650	28669	\$ 5,485,526.46	\$ 831,401.00	\$ 6,316,927.46	\$ 4,421,849.22	81	\$ 1,101,858.69	\$ 23,221.89
	10652	28727	\$ 5,496,624.18	\$ 833,083.00	\$ 6,329,707.18	\$ 4,430,795.03	81	\$ 1,104,087.85	\$ 23,268.87
	10656	28669	\$ 5,485,526.46	\$ 831,401.00	\$ 6,316,927.46	\$ 4,421,849.22	81	\$ 1,101,858.69	\$ 23,221.89
	10802	28669	\$ 5,485,526.46	\$ 831,401.00	\$ 6,316,927.46	\$ 4,421,849.22	81	\$ 1,101,858.69	\$ 23,221.89
	10804	28669	\$ 5,485,526.46	\$ 831,401.00	\$ 6,316,927.46	\$ 4,421,849.22	81	\$ 1,101,858.69	\$ 23,221.89
	10806	28669	\$ 5,485,526.46	\$ 831,401.00	\$ 6,316,927.46	\$ 4,421,849.22	81	\$ 1,101,858.69	\$ 23,221.89

Table 42: JBSA-Lackland Initial Costs

The new construction costs were determined by multiplying the square footage of each facility by the union dormitory per square footage cost of \$191.34 shown in Table 12 (RS

Means, 2016). The Union price used to calculate the new construction costs was used based on the aforementioned assumption that the estimate should be as conservative as possible to ensure the integrity of the cost estimation model. The demolition price was calculated by multiplying the square footage by the average Air Force demolition cost of \$29.00 per square foot (UFC 3-730-01, 2011). The new construction cost was added to the demolition cost to determine the complete cost to construct a new dormitory. Since no new construction will be occurring in any phase (status quo, privatization, or identical FSRM), the full renovation cost is calculated by multiplying the new dorm cost by 70%. The 70% is the estimated cost for full renovation used by all accompanied housing privatization estimates, which drives its use in this model (AETC Group I, 2005). With the number of personnel in each existing dormitory not available, the number of personnel is determined by dividing the actual square footage of each facility by 355 square foot per person to accommodate the Dorms-4-Airmen construct (AFUHDG, 2016). BAH is determined by multiplying the number of personnel by the BAH rate for JBSA-Lackland, which is \$1,137.00 per month or \$13,644.00 per year. Finally, the initial utilities costs are calculated by multiplying the facility square footage by the \$0.81 per square foot historical average for federal dormitories (DOE, 2016).

The initial Manpower calculation for JBSA-Lackland is shown in Table 43.

Lackland									
Grade Housing Office	Base Pay	Approx Benefits (32.85%)*	STATUS QUO		IDENTICAL FSRM		PRIVATIZATION		Military Grade Equivalent
			Positions	Funding	Positions	Funding	Positions	Funding	
GS-11/7	\$ 63,337.00	\$ 20,806.20	1	\$ 84,143.20	1	\$ 84,143.20	1	\$ 84,143.20	O-3
GS-9/10	\$ 56,706.00	\$ 18,627.92	1	\$ 75,333.92	1	\$ 75,333.92	1	\$ 75,333.92	O-2
GS-9/8	\$ 53,799.00	\$ 17,672.97	1	\$ 71,471.97	1	\$ 71,471.97	1	\$ 71,471.97	O-1
GS-7/10	\$ 46,362.00	\$ 15,229.92	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/9	\$ 45,173.00	\$ 14,839.33	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/5	\$ 40,418.00	\$ 13,277.31	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/4	\$ 39,229.00	\$ 12,886.73	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/3	\$ 38,040.00	\$ 12,496.14	8	\$ 404,289.12	8	\$ 404,289.12	0	\$ -	E-7
GS-5/8	\$ 35,512.00	\$ 11,665.69	16	\$ 754,843.07	16	\$ 754,843.07	0	\$ -	E-6
GS-4/4	\$ 28,305.00	\$ 9,298.19	40	\$ 1,504,127.70	10	\$ 376,031.93	0	\$ -	E-5
			67	\$ 2,894,208.99	37	\$ 1,766,113.21		\$ 230,949.10	

Table 43: JBSA-Lackland Manpower Initial Costs

The number of personnel in the status quo and identical FSRM alternatives are based on the allotted personnel per number of individuals living in unaccompanied housing per installation. JBSA-Lackland has 8,683 individuals occupying unaccompanied housing units, which earns one GS-11/7, one GS-9/10, one GS-9/8, eight Air Force Master Sergeants, 16 Air Force Technical Sergeants and 40 Air Force Staff Sergeants (AFI 32-6005, 2013). In the privatization alternative, only Flight leadership will be retained to run the Asset Management Flight, which includes one GS-11/7, one GS-9/10, and one GS-9/8. The JBSA-Lackland initial costs combined with the JBSA-Lackland manpower initial cost calculations provide the basis for each calculation in the status quo, privatization, and identical FSRM alternative.

4.2.6.1. JBSA-Lackland Status Quo

The JBSA-Lackland status quo estimate included BAH, O&M, Utilities, Moves, and Manpower. The complete estimate for the status quo alternative is shown in Table 44, and totaled \$1,311,606,171.28.

JBSA-Lackland Status Quo					
Year	BAH	O&M	Utilities	Moves	Manpower
1	\$ 5,814,639.01	\$ 5,912,456.26	\$ 2,143,966.65	\$ 20,067,834.67	\$ 2,442,798.51
2	\$ 5,707,896.84	\$ 5,826,768.49	\$ 2,112,894.67	\$ 19,699,439.63	\$ 2,397,459.23
3	\$ 5,611,386.51	\$ 5,742,322.57	\$ 2,082,273.01	\$ 19,366,357.32	\$ 2,356,459.20
4	\$ 5,531,417.47	\$ 5,659,100.51	\$ 2,052,095.14	\$ 19,090,363.34	\$ 2,322,398.69
5	\$ 5,456,596.37	\$ 5,577,084.56	\$ 2,022,354.63	\$ 18,832,136.20	\$ 2,288,830.49
6	\$ 5,382,787.33	\$ 5,496,257.24	\$ 1,993,045.14	\$ 18,577,401.99	\$ 2,255,747.49
7	\$ 5,309,976.68	\$ 5,416,601.34	\$ 1,964,160.43	\$ 18,326,113.46	\$ 2,223,142.68
8	\$ 5,238,150.91	\$ 5,338,099.87	\$ 1,935,694.33	\$ 18,078,224.01	\$ 2,191,009.14
9	\$ 5,167,296.70	\$ 5,260,736.11	\$ 1,907,640.79	\$ 17,833,687.64	\$ 2,159,340.06
10	\$ 5,097,400.90	\$ 5,184,493.56	\$ 1,879,993.83	\$ 17,592,459.02	\$ 2,128,128.73
11	\$ 5,028,450.55	\$ 5,109,355.97	\$ 1,852,747.54	\$ 17,354,493.39	\$ 2,097,368.53
12	\$ 4,960,432.86	\$ 5,035,307.33	\$ 1,825,896.12	\$ 17,119,746.62	\$ 2,067,052.94
13	\$ 4,893,335.22	\$ 4,962,331.86	\$ 1,799,433.86	\$ 16,888,175.17	\$ 2,037,175.54
14	\$ 4,827,145.17	\$ 4,890,414.01	\$ 1,773,355.11	\$ 16,659,736.08	\$ 2,007,729.99
15	\$ 4,761,850.46	\$ 4,819,538.44	\$ 1,747,654.31	\$ 16,434,387.00	\$ 1,978,710.05
16	\$ 4,697,438.95	\$ 4,749,690.06	\$ 1,722,325.99	\$ 16,212,086.11	\$ 1,950,109.56
17	\$ 4,633,898.72	\$ 4,680,853.97	\$ 1,697,364.74	\$ 15,992,792.19	\$ 1,921,922.47
18	\$ 4,571,217.96	\$ 4,613,015.51	\$ 1,672,765.25	\$ 15,776,464.57	\$ 1,894,142.80
19	\$ 4,509,385.06	\$ 4,546,160.21	\$ 1,648,522.28	\$ 15,563,063.11	\$ 1,866,764.66
20	\$ 4,448,388.55	\$ 4,480,273.83	\$ 1,624,630.65	\$ 15,352,548.25	\$ 1,839,782.24
21	\$ 4,388,217.11	\$ 4,415,342.33	\$ 1,601,085.28	\$ 15,144,880.93	\$ 1,813,189.83
22	\$ 4,328,859.58	\$ 4,351,351.86	\$ 1,577,881.14	\$ 14,940,022.64	\$ 1,786,981.80
23	\$ 4,270,304.96	\$ 4,288,288.79	\$ 1,555,013.30	\$ 14,737,935.37	\$ 1,761,152.57
24	\$ 4,212,542.38	\$ 4,226,139.67	\$ 1,532,476.88	\$ 14,538,581.66	\$ 1,735,696.68
25	\$ 4,155,561.13	\$ 4,164,891.27	\$ 1,510,267.07	\$ 14,341,924.52	\$ 1,710,608.74
26	\$ 4,099,350.64	\$ 4,104,530.53	\$ 1,488,379.14	\$ 14,147,927.47	\$ 1,685,883.42
27	\$ 4,043,900.49	\$ 4,045,044.58	\$ 1,466,808.43	\$ 13,956,554.54	\$ 1,661,515.48
28	\$ 3,989,200.39	\$ 3,986,420.75	\$ 1,445,550.33	\$ 13,767,770.23	\$ 1,637,499.76
29	\$ 3,935,240.19	\$ 3,928,646.53	\$ 1,424,600.33	\$ 13,581,539.52	\$ 1,613,831.16
30	\$ 3,882,009.89	\$ 3,871,709.63	\$ 1,403,953.95	\$ 13,397,827.87	\$ 1,590,504.68
31	\$ 3,829,499.61	\$ 3,815,597.89	\$ 1,383,606.79	\$ 13,216,601.21	\$ 1,567,515.35
32	\$ 3,777,699.61	\$ 3,760,299.37	\$ 1,363,554.52	\$ 13,037,825.93	\$ 1,544,858.32
33	\$ 3,726,600.29	\$ 3,705,802.28	\$ 1,343,792.86	\$ 12,861,468.87	\$ 1,522,528.77
34	\$ 3,676,192.17	\$ 3,652,095.00	\$ 1,324,317.60	\$ 12,687,497.31	\$ 1,500,521.98
35	\$ 3,626,465.90	\$ 3,599,166.09	\$ 1,305,124.59	\$ 12,515,878.99	\$ 1,478,833.28
36	\$ 3,577,412.26	\$ 3,547,004.26	\$ 1,286,209.74	\$ 12,346,582.07	\$ 1,457,458.06
37	\$ 3,529,022.14	\$ 3,495,598.40	\$ 1,267,569.02	\$ 12,179,575.16	\$ 1,436,391.81
38	\$ 3,481,286.57	\$ 3,444,937.56	\$ 1,249,198.45	\$ 12,014,827.29	\$ 1,415,630.05
39	\$ 3,434,196.71	\$ 3,395,010.92	\$ 1,231,094.13	\$ 11,852,307.89	\$ 1,395,168.38
40	\$ 3,387,743.81	\$ 3,345,807.87	\$ 1,213,252.18	\$ 11,691,986.81	\$ 1,375,002.47
41	\$ 3,341,919.25	\$ 3,297,317.90	\$ 1,195,668.82	\$ 11,533,834.33	\$ 1,355,128.04
42	\$ 3,296,714.55	\$ 3,249,530.68	\$ 1,178,340.29	\$ 11,377,821.12	\$ 1,335,540.87
43	\$ 3,252,121.31	\$ 3,202,436.03	\$ 1,161,262.89	\$ 11,223,918.22	\$ 1,316,236.82
44	\$ 3,208,131.26	\$ 3,156,023.92	\$ 1,144,432.99	\$ 11,072,097.11	\$ 1,297,211.80
45	\$ 3,164,736.25	\$ 3,110,284.44	\$ 1,127,847.01	\$ 10,922,329.61	\$ 1,278,461.76
46	\$ 3,121,928.22	\$ 3,065,207.85	\$ 1,111,501.40	\$ 10,774,587.95	\$ 1,259,982.74
47	\$ 3,079,699.24	\$ 3,020,784.55	\$ 1,095,392.68	\$ 10,628,844.73	\$ 1,241,770.81
48	\$ 3,038,041.47	\$ 2,977,005.07	\$ 1,079,517.43	\$ 10,485,072.92	\$ 1,223,822.13
49	\$ 2,996,947.19	\$ 2,933,860.07	\$ 1,063,872.25	\$ 10,343,245.85	\$ 1,206,132.87
50	\$ 2,956,408.78	\$ 2,891,340.35	\$ 1,048,453.81	\$ 10,203,337.21	\$ 1,188,699.30
Total =	\$ 210,457,045.56	\$ 211,348,338.16	\$ 76,638,839.74	\$ 726,342,115.08	\$ 86,819,832.74
		Lackland Total NPV =	\$ 1,311,606,171.28		

Table 44: JBSA-Lackland Status Quo Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.86 for JBSA-Lackland found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.6.2. JBSA-Lackland Privatization

The JBSA-Lackland privatization estimate included BAH, Moves, Manpower, and Project Management. The complete estimate for the privatization alternative is shown in Table 45, and totaled \$4,928,824,514.78.

JBSA-Lackland Privatization			
BAH	Moves	Manpower	Proj Mgt
\$ 116,267,598.63	\$ 21,898,532.03	\$ 194,927.91	\$ 476,876.81
\$ 114,109,627.06	\$ 21,574,755.65	\$ 191,309.97	\$ 414,182.12
\$ 112,158,187.06	\$ 23,624,583.09	\$ 188,038.30	\$ 407,099.01
\$ 110,537,040.71	\$ 23,299,530.12	\$ 185,320.37	\$ 401,214.75
\$ 108,939,326.57	\$ 21,067,311.15	\$ 182,641.73	\$ 395,415.55
\$ 107,364,705.97	\$ 26,633,478.96	\$ 180,001.81	\$ 389,700.17
\$ 105,812,845.10	\$ 28,818,498.13	\$ 177,400.04	\$ 384,067.41
\$ 104,283,414.99	\$ 19,726,027.38	\$ 174,835.88	\$ 378,516.06
\$ 102,776,091.43	\$ 20,893,623.08	\$ 172,308.79	\$ 373,044.94
\$ 101,290,554.88	\$ 19,862,645.94	\$ 169,818.22	\$ 367,652.91
\$ 99,826,490.43	\$ 18,900,569.80	\$ 167,363.65	\$ 362,338.82
\$ 98,383,587.73	\$ 23,500,975.54	\$ 164,944.55	\$ 357,101.53
\$ 96,961,540.90	\$ 18,448,311.67	\$ 162,560.43	\$ 351,939.95
\$ 95,560,048.48	\$ 17,988,783.91	\$ 160,210.76	\$ 346,852.97
\$ 94,178,813.38	\$ 17,744,573.82	\$ 157,895.06	\$ 341,839.52
\$ 92,817,542.80	\$ 16,212,086.11	\$ 155,612.83	\$ 117,914.49
\$ 91,475,948.18	\$ 15,992,792.19	\$ 153,363.58	\$ 116,210.14
\$ 90,153,745.10	\$ 15,776,464.57	\$ 151,146.85	\$ 114,530.43
\$ 88,850,653.29	\$ 15,563,063.11	\$ 148,962.16	\$ 112,874.99
\$ 87,566,396.50	\$ 15,352,548.25	\$ 146,809.04	\$ 111,243.48
\$ 86,300,702.50	\$ 15,144,880.93	\$ 144,687.05	\$ 109,635.56
\$ 85,053,302.97	\$ 14,940,022.64	\$ 142,595.73	\$ 108,050.88
\$ 83,823,933.49	\$ 14,737,935.37	\$ 140,534.63	\$ 106,489.10
\$ 82,612,333.45	\$ 14,538,581.66	\$ 138,503.33	\$ 104,949.89
\$ 81,418,246.00	\$ 14,341,924.52	\$ 136,501.39	\$ 103,432.93
\$ 80,241,418.02	\$ 14,147,927.47	\$ 134,528.38	\$ 101,937.90
\$ 79,081,600.04	\$ 13,956,554.54	\$ 132,583.89	\$ 100,464.48
\$ 77,938,546.18	\$ 13,767,770.23	\$ 130,667.51	\$ 99,012.36
\$ 76,812,014.15	\$ 13,581,539.52	\$ 128,778.83	\$ 97,581.22
\$ 75,701,765.14	\$ 13,397,827.87	\$ 126,917.45	\$ 96,170.77
\$ 74,607,563.78	\$ 13,216,601.21	\$ 125,082.97	\$ 257,261.93
\$ 73,529,178.12	\$ 13,037,825.93	\$ 123,275.01	\$ 253,543.44
\$ 72,466,379.57	\$ 12,861,468.87	\$ 121,493.18	\$ 249,878.70
\$ 71,418,942.82	\$ 12,687,497.31	\$ 119,737.10	\$ 246,266.92
\$ 70,386,645.83	\$ 12,515,878.99	\$ 118,006.41	\$ 242,707.35
\$ 69,369,269.77	\$ 12,346,582.07	\$ 116,300.73	\$ 239,199.24
\$ 68,366,598.97	\$ 12,179,575.16	\$ 114,619.71	\$ 235,741.83
\$ 67,378,420.88	\$ 12,014,827.29	\$ 112,962.98	\$ 232,334.39
\$ 66,404,526.02	\$ 11,852,307.89	\$ 111,330.20	\$ 228,976.20
\$ 65,444,707.95	\$ 11,691,986.81	\$ 109,721.03	\$ 225,666.56
\$ 64,498,763.18	\$ 11,533,834.33	\$ 108,135.11	\$ 222,404.75
\$ 63,566,491.21	\$ 11,377,821.12	\$ 106,572.11	\$ 219,190.09
\$ 62,647,694.39	\$ 11,223,918.22	\$ 105,031.71	\$ 216,021.89
\$ 61,742,177.95	\$ 11,072,097.11	\$ 103,513.57	\$ 212,899.49
\$ 60,849,749.95	\$ 10,922,329.61	\$ 102,017.37	\$ 209,822.21
\$ 59,970,221.20	\$ 10,774,587.95	\$ 100,542.80	\$ 76,185.58
\$ 59,103,405.25	\$ 10,628,844.73	\$ 99,089.54	\$ 75,084.38
\$ 58,249,118.35	\$ 10,485,072.92	\$ 97,657.29	\$ 73,999.10
\$ 57,407,179.40	\$ 10,343,245.85	\$ 96,245.74	\$ 72,929.51
\$ 56,577,409.93	\$ 10,203,337.21	\$ 94,854.60	\$ 71,875.38
\$ 4,132,282,465.62	\$ 778,403,759.80	\$ 6,927,959.26	\$ 11,210,330.09
	Lackland Total NPV =	\$ 4,928,824,514.78	

Table 45: JBSA-Lackland Privatization Estimate

As previously discussed, Scoring is assumed to be zero in the cost estimate model to create the most conservative estimate possible. The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.86 for JBSA-Lackland found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.6.3. JBSA-Lackland Identical FSRM

The JBSA-Lackland identical FSRM estimate included BAH, FSRM Renovation #1, O&M, Utilities, Moves, Manpower, and Out Year Renovation. The complete estimate for the identical FSRM alternative is shown in Table 46, and totaled \$1,946,579,534.08.

JBSA-Lackland Identical FSRM						
BAH	FSRM Reno 1	O&M	Utilities	Moves	Manpower	Out Year Reno
\$ 9,527,740.65	\$ 2,161,926.84	\$ 5,912,456.26	\$ 2,143,966.65	\$ 21,898,532.03	\$ 2,442,798.51	
\$ 9,511,496.03	\$ 2,223,337.35	\$ 5,826,768.49	\$ 2,112,894.67	\$ 21,574,755.65	\$ 2,397,459.23	
\$ 14,239,280.03	\$ 5,060,871.83	\$ 5,742,322.57	\$ 2,082,273.01	\$ 23,624,583.09	\$ 2,356,459.20	
\$ 14,057,024.61	\$ 5,001,339.74	\$ 5,659,100.51	\$ 2,052,095.14	\$ 23,299,530.12	\$ 2,322,398.69	
\$ 9,972,446.49	\$ 2,653,237.79	\$ 5,577,084.56	\$ 2,022,354.63	\$ 21,067,311.15	\$ 2,288,830.49	
\$ 21,663,754.84	\$ 9,553,503.99	\$ 5,496,257.24	\$ 1,993,045.14	\$ 26,633,478.96	\$ 2,255,747.49	
\$ 26,494,274.79	\$ 12,430,474.77	\$ 5,416,601.34	\$ 1,964,160.43	\$ 28,818,498.13	\$ 2,223,142.68	
\$ 8,541,018.40	\$ 1,950,263.66	\$ 5,338,099.87	\$ 1,935,694.33	\$ 19,726,027.38	\$ 2,191,009.14	
\$ 11,310,880.34	\$ 3,618,050.58	\$ 5,260,736.11	\$ 1,907,640.79	\$ 20,893,623.08	\$ 2,159,340.06	
\$ 9,639,327.24	\$ 2,681,627.31	\$ 5,184,493.56	\$ 1,879,993.83	\$ 19,862,645.94	\$ 2,128,128.73	
\$ 8,103,992.96	\$ 1,824,492.93	\$ 5,109,355.97	\$ 1,852,747.54	\$ 18,900,569.80	\$ 2,097,368.53	
\$ 17,754,233.16	\$ 7,522,981.36	\$ 5,035,307.33	\$ 1,825,896.12	\$ 23,500,975.54	\$ 2,067,052.94	
\$ 7,983,148.38	\$ 1,837,480.29	\$ 4,962,331.86	\$ 1,799,433.86	\$ 18,448,311.67	\$ 2,037,175.54	
\$ 7,446,193.32	\$ 1,563,778.11	\$ 4,890,414.01	\$ 1,773,355.11	\$ 17,988,783.91	\$ 2,007,729.99	
\$ 7,336,793.12	\$ 1,540,076.08	\$ 4,819,538.44	\$ 1,747,654.31	\$ 17,744,573.82	\$ 1,978,710.05	
\$ 4,640,877.14		\$ 4,749,690.06	\$ 1,722,325.99	\$ 16,212,086.11	\$ 1,950,109.56	
\$ 4,573,797.41		\$ 4,680,853.97	\$ 1,697,364.74	\$ 15,992,792.19	\$ 1,921,922.47	
\$ 4,507,687.25		\$ 4,613,015.51	\$ 1,672,765.25	\$ 15,776,464.57	\$ 1,894,142.80	
\$ 4,442,532.66		\$ 4,546,160.21	\$ 1,648,522.28	\$ 15,563,063.11	\$ 1,866,764.66	
\$ 4,378,319.83		\$ 4,480,273.83	\$ 1,624,630.65	\$ 15,352,548.25	\$ 1,839,782.24	
\$ 4,315,035.12		\$ 4,415,342.33	\$ 1,601,085.28	\$ 15,144,880.93	\$ 1,813,189.83	
\$ 4,252,665.15		\$ 4,351,351.86	\$ 1,577,881.14	\$ 14,940,022.64	\$ 1,786,981.80	
\$ 4,191,196.67		\$ 4,288,288.79	\$ 1,555,013.30	\$ 14,737,935.37	\$ 1,761,152.57	
\$ 4,130,616.67		\$ 4,226,139.67	\$ 1,532,476.88	\$ 14,538,581.66	\$ 1,735,696.68	
\$ 4,070,912.30		\$ 4,164,891.27	\$ 1,510,267.07	\$ 14,341,924.52	\$ 1,710,608.74	
\$ 4,012,070.90		\$ 4,104,530.53	\$ 1,488,379.14	\$ 14,147,927.47	\$ 1,685,883.42	
\$ 3,954,080.00		\$ 4,045,044.58	\$ 1,466,808.43	\$ 13,956,554.54	\$ 1,661,515.48	
\$ 3,896,927.31		\$ 3,986,420.75	\$ 1,445,550.33	\$ 13,767,770.23	\$ 1,637,499.76	
\$ 3,840,600.71		\$ 3,928,646.53	\$ 1,424,600.33	\$ 13,581,539.52	\$ 1,613,831.16	
\$ 3,785,088.26		\$ 3,871,709.63	\$ 1,403,953.95	\$ 13,397,827.87	\$ 1,590,504.68	
\$ 3,730,378.19		\$ 3,815,597.89	\$ 1,383,606.79	\$ 14,422,291.68	\$ 1,567,515.35	\$ 1,395,197.38
\$ 3,676,458.91		\$ 3,760,299.37	\$ 1,363,554.52	\$ 14,278,980.21	\$ 1,544,858.32	\$ 1,434,828.60
\$ 3,623,318.98		\$ 3,705,802.28	\$ 1,343,792.86	\$ 15,689,416.18	\$ 1,522,528.77	\$ 3,266,028.71
\$ 3,570,947.14		\$ 3,652,095.00	\$ 1,324,317.60	\$ 15,484,918.77	\$ 1,500,521.98	\$ 3,227,609.73
\$ 3,519,332.29		\$ 3,599,166.09	\$ 1,305,124.59	\$ 14,001,381.15	\$ 1,478,833.28	\$ 1,712,264.42
\$ 26,494,129.55		\$ 3,547,004.26	\$ 1,286,209.74	\$ 17,700,668.48	\$ 1,457,458.06	\$ 6,165,344.50
\$ 26,206,198.92		\$ 3,495,598.40	\$ 1,267,569.02	\$ 19,152,837.01	\$ 1,436,391.81	\$ 8,021,994.79
\$ 28,767,696.30		\$ 3,444,937.56	\$ 1,249,198.45	\$ 13,109,961.02	\$ 1,415,630.05	\$ 1,258,600.76
\$ 28,366,038.89		\$ 3,395,010.92	\$ 1,231,094.13	\$ 13,885,947.68	\$ 1,395,168.38	\$ 2,334,905.42
\$ 25,624,305.38		\$ 3,345,807.87	\$ 1,213,252.18	\$ 13,200,758.02	\$ 1,375,002.47	\$ 1,730,585.57
\$ 32,364,011.85		\$ 3,297,317.90	\$ 1,195,668.82	\$ 12,561,360.11	\$ 1,355,128.04	\$ 1,177,434.74
\$ 34,986,238.85		\$ 3,249,530.68	\$ 1,178,340.29	\$ 15,618,799.84	\$ 1,335,540.87	\$ 4,854,948.69
\$ 23,925,278.67		\$ 3,202,436.03	\$ 1,161,262.89	\$ 12,260,788.36	\$ 1,316,236.82	\$ 1,185,816.12
\$ 25,317,603.23		\$ 3,156,023.92	\$ 1,144,432.99	\$ 11,955,385.20	\$ 1,297,211.80	\$ 1,009,182.68
\$ 24,045,698.40		\$ 3,110,284.44	\$ 1,127,847.01	\$ 11,793,082.64	\$ 1,278,461.76	\$ 993,886.60
\$ 22,859,496.05		\$ 3,065,207.85	\$ 1,111,501.40	\$ 10,774,587.95	\$ 1,259,982.74	
\$ 28,396,780.58		\$ 3,020,784.55	\$ 1,095,392.68	\$ 10,628,844.73	\$ 1,241,770.81	
\$ 22,270,568.48		\$ 2,977,005.07	\$ 1,079,517.43	\$ 10,485,072.92	\$ 1,223,822.13	
\$ 21,695,413.96		\$ 2,933,860.07	\$ 1,063,872.25	\$ 10,343,245.85	\$ 1,206,132.87	
\$ 21,380,761.54		\$ 2,891,340.35	\$ 1,048,453.81	\$ 10,203,337.21	\$ 1,188,699.30	
\$ 657,394,667.88	\$ 61,623,442.63	\$ 211,348,338.16	\$ 76,638,839.74	\$ 812,985,784.23	\$ 86,819,832.74	\$ 39,768,628.69
		Lackland Total NPV =	\$ 1,946,579,534.08			

Table 46: JBSA-Lackland Identical FSRM Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.86 for JBSA-Lackland found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.7. Laughlin AFB Estimate

The Laughlin AFB cost data comes from all O&M costs from the years 2008-2015. Table 47 shows the O&M costs per year as well as the average over that period.

Laughlin Data	
Year	O&M Cost Data
2008	\$ 67,175.73
2009	\$ 134,874.85
2010	\$ 177,161.06
2011	\$ 452,904.60
2012	\$ 577,484.43
2013	\$ 244,991.09
2014	\$ 611,584.71
2015	\$ 1,548,339.62
Mean	\$ 476,814.51

Table 47: Laughlin AFB O&M Cost Data

Within the O&M cost data, the facility number and square footage for each facility associated with each O&M is provided and utilized to determine the costs for Laughlin AFB. Table 48 details the Laughlin AFB initial costs.

Base	Facility	SF	New Construction Cost	Demolition Cost	New Dorm Cost	Full Renovation Cost	PRSNL	BAH	Utilities
Laughlin	255	27648	\$ 5,290,168.32	\$ 801,792.00	\$ 6,091,960.32	\$ 4,264,372.22	78	\$ 644,860.39	\$ 22,394.88
	256	27648	\$ 5,290,168.32	\$ 801,792.00	\$ 6,091,960.32	\$ 4,264,372.22	78	\$ 644,860.39	\$ 22,394.88

Table 48: Laughlin AFB Initial Costs

The new construction costs were determined by multiplying the square footage of each facility by the union dormitory per square footage cost of \$191.34 shown in Table 12 (RS Means, 2016). The Union price used to calculate the new construction costs was used

based on the aforementioned assumption that the estimate should be as conservative as possible to ensure the integrity of the cost estimation model. The demolition price was calculated by multiplying the square footage by the average Air Force demolition cost of \$29.00 per square foot (UFC 3-730-01, 2011). The new construction cost was added to the demolition cost to determine the complete cost to construct a new dormitory. Since no new construction will be occurring in any phase (status quo, privatization, or identical FSRM), the full renovation cost is calculated by multiplying the new dorm cost by 70%. The 70% is the estimated cost for full renovation used by all accompanied housing privatization estimates, which drives its use in this model (AETC Group I, 2005). With the number of personnel in each existing dormitory not available, the number of personnel is determined by dividing the actual square footage of each facility by 355 square foot per person to accommodate the Dorms-4-Airmen construct (AFUHDG, 2016). BAH is determined by multiplying the number of personnel by the BAH rate for Laughlin AFB, which is \$690.00 per month or \$8,280.00 per year. Finally, the initial utilities costs are calculated by multiplying the facility square footage by the \$0.81 per square foot historical average for federal dormitories (DOE, 2016).

The initial Manpower calculation for Laughlin AFB is shown in Table 49.

Laughlin									
Grade Housing Office	Base Pay	Approx Benefits (32.85%)*	STATUS QUO		IDENTICAL FSRM		PRIVATIZATION		Military Grade Equivalent
			Positions	Funding	Positions	Funding	Positions	Funding	
GS-11/7	\$ 63,337.00	\$ 20,806.20	1	\$ 84,143.20	1	\$ 84,143.20	1	\$ 84,143.20	O-3
GS-9/10	\$ 56,706.00	\$ 18,627.92	1	\$ 75,333.92	1	\$ 75,333.92	1	\$ 75,333.92	O-2
GS-9/8	\$ 53,799.00	\$ 17,672.97	1	\$ 71,471.97	1	\$ 71,471.97	1	\$ 71,471.97	O-1
GS-7/10	\$ 46,362.00	\$ 15,229.92	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/9	\$ 45,173.00	\$ 14,839.33	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/5	\$ 40,418.00	\$ 13,277.31	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/4	\$ 39,229.00	\$ 12,886.73	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/3	\$ 38,040.00	\$ 12,496.14	1	\$ 50,536.14	1	\$ 50,536.14	0	\$ -	E-7
GS-5/8	\$ 35,512.00	\$ 11,665.69	0	\$ -	0	\$ -	0	\$ -	E-6
GS-4/4	\$ 28,305.00	\$ 9,298.19	1	\$ 37,603.19	1	\$ 37,603.19	0	\$ -	E-5
			5	\$ 319,088.43	5	\$ 319,088.43		\$ 230,949.10	

Table 49: Laughlin AFB Manpower Initial Costs

The number of personnel in the status quo and identical FSRM alternatives are based on the allotted personnel per number of individuals living in unaccompanied housing per installation. Laughlin AFB has 156 individuals occupying unaccompanied housing units, which earns one GS-11/7, one GS-9/10, one GS-9/8, one Air Force Master Sergeant, and one Air Force Staff Sergeant (AFI 32-6005, 2013). In the privatization alternative, only Flight leadership will be retained to run the Asset Management Flight, which includes one GS-11/7, one GS-9/10, and one GS-9/8. The Laughlin AFB initial costs combined with the Laughlin AFB manpower initial cost calculations provide the basis for each calculation in the status quo, privatization, and identical FSRM alternative.

4.2.7.1. Laughlin AFB Status Quo

The Laughlin AFB status quo estimate included BAH, O&M, Utilities, Moves, and Manpower. The complete estimate for the status quo alternative is shown in Table 50, and totaled \$42,391,662.64.

Laughlin AFB Status Quo					
Year	BAH	O&M	Utilities	Moves	Manpower
1	\$ 63,302.24	\$ 433,250.80	\$ 40,697.59	\$ 360,004.72	\$ 284,978.28
2	\$ 62,140.17	\$ 426,971.80	\$ 40,107.77	\$ 353,395.94	\$ 279,688.97
3	\$ 61,089.49	\$ 420,783.81	\$ 39,526.49	\$ 347,420.64	\$ 274,905.88
4	\$ 60,218.89	\$ 414,685.49	\$ 38,953.65	\$ 342,469.48	\$ 270,932.36
5	\$ 59,404.33	\$ 408,675.56	\$ 38,389.10	\$ 337,837.04	\$ 267,016.28
6	\$ 58,600.80	\$ 402,752.72	\$ 37,832.74	\$ 333,267.27	\$ 263,156.80
7	\$ 57,808.13	\$ 396,915.73	\$ 37,284.44	\$ 328,759.30	\$ 259,353.10
8	\$ 57,026.18	\$ 391,163.32	\$ 36,744.08	\$ 324,312.32	\$ 255,604.38
9	\$ 56,254.82	\$ 385,494.29	\$ 36,211.56	\$ 319,925.48	\$ 251,909.85
10	\$ 55,493.88	\$ 379,907.42	\$ 35,686.75	\$ 315,597.99	\$ 248,268.72
11	\$ 54,743.24	\$ 374,401.51	\$ 35,169.55	\$ 311,329.03	\$ 244,680.22
12	\$ 54,002.75	\$ 368,975.40	\$ 34,659.85	\$ 307,117.82	\$ 241,143.58
13	\$ 53,272.28	\$ 363,627.93	\$ 34,157.53	\$ 302,963.57	\$ 237,658.07
14	\$ 52,551.69	\$ 358,357.96	\$ 33,662.50	\$ 298,865.51	\$ 234,222.93
15	\$ 51,840.84	\$ 353,164.37	\$ 33,174.63	\$ 294,822.88	\$ 230,837.45
16	\$ 51,139.61	\$ 348,046.05	\$ 32,693.84	\$ 290,834.94	\$ 227,500.90
17	\$ 50,447.87	\$ 343,001.90	\$ 32,220.02	\$ 286,900.94	\$ 224,212.58
18	\$ 49,765.48	\$ 338,030.86	\$ 31,753.06	\$ 283,020.16	\$ 220,971.79
19	\$ 49,092.33	\$ 333,131.86	\$ 31,292.87	\$ 279,191.86	\$ 217,777.84
20	\$ 48,428.28	\$ 328,303.86	\$ 30,839.35	\$ 275,415.36	\$ 214,630.05
21	\$ 47,773.21	\$ 323,545.84	\$ 30,392.41	\$ 271,689.93	\$ 211,527.77
22	\$ 47,127.00	\$ 318,856.76	\$ 29,951.94	\$ 268,014.90	\$ 208,470.32
23	\$ 46,489.53	\$ 314,235.65	\$ 29,517.85	\$ 264,389.58	\$ 205,457.07
24	\$ 45,860.69	\$ 309,681.51	\$ 29,090.06	\$ 260,813.29	\$ 202,487.37
25	\$ 45,240.35	\$ 305,193.37	\$ 28,668.46	\$ 257,285.38	\$ 199,560.60
26	\$ 44,628.41	\$ 300,770.28	\$ 28,252.98	\$ 253,805.19	\$ 196,676.13
27	\$ 44,024.74	\$ 296,411.29	\$ 27,843.51	\$ 250,372.08	\$ 193,833.35
28	\$ 43,429.23	\$ 292,115.48	\$ 27,439.98	\$ 246,985.40	\$ 191,031.66
29	\$ 42,841.78	\$ 287,881.92	\$ 27,042.30	\$ 243,644.54	\$ 188,270.47
30	\$ 42,262.28	\$ 283,709.72	\$ 26,650.38	\$ 240,348.86	\$ 185,549.19
31	\$ 41,690.62	\$ 279,597.98	\$ 26,264.15	\$ 237,097.77	\$ 182,867.24
32	\$ 41,126.69	\$ 275,545.84	\$ 25,883.51	\$ 233,890.65	\$ 180,224.06
33	\$ 40,570.38	\$ 271,552.42	\$ 25,508.38	\$ 230,726.91	\$ 177,619.08
34	\$ 40,021.61	\$ 267,616.88	\$ 25,138.70	\$ 227,605.97	\$ 175,051.76
35	\$ 39,480.25	\$ 263,738.37	\$ 24,774.37	\$ 224,527.24	\$ 172,521.54
36	\$ 38,946.22	\$ 259,916.08	\$ 24,415.32	\$ 221,490.15	\$ 170,027.89
37	\$ 38,419.41	\$ 256,149.18	\$ 24,061.47	\$ 218,494.15	\$ 167,570.29
38	\$ 37,899.73	\$ 252,436.87	\$ 23,712.76	\$ 215,538.68	\$ 165,148.21
39	\$ 37,387.07	\$ 248,778.36	\$ 23,369.09	\$ 212,623.18	\$ 162,761.14
40	\$ 36,881.35	\$ 245,172.88	\$ 23,030.41	\$ 209,747.12	\$ 160,408.58
41	\$ 36,382.48	\$ 241,619.65	\$ 22,696.64	\$ 206,909.96	\$ 158,090.02
42	\$ 35,890.35	\$ 238,117.92	\$ 22,367.70	\$ 204,111.17	\$ 155,804.97
43	\$ 35,404.87	\$ 234,666.93	\$ 22,043.53	\$ 201,350.25	\$ 153,552.94
44	\$ 34,925.97	\$ 231,265.96	\$ 21,724.06	\$ 198,626.67	\$ 151,333.47
45	\$ 34,453.54	\$ 227,914.28	\$ 21,409.22	\$ 195,939.93	\$ 149,146.08
46	\$ 33,987.50	\$ 224,611.18	\$ 21,098.94	\$ 193,289.54	\$ 146,990.31
47	\$ 33,527.77	\$ 221,355.94	\$ 20,793.16	\$ 190,674.99	\$ 144,865.70
48	\$ 33,074.25	\$ 218,147.89	\$ 20,491.81	\$ 188,095.82	\$ 142,771.79
49	\$ 32,626.87	\$ 214,986.32	\$ 20,194.83	\$ 185,551.52	\$ 140,708.15
50	\$ 32,185.54	\$ 211,870.58	\$ 19,902.15	\$ 183,041.65	\$ 138,674.34
Total =	\$ 2,291,182.98	\$ 15,487,105.98	\$ 1,454,787.44	\$ 13,030,134.71	\$ 10,128,451.54
		Laughlin Total NPV =	\$ 42,391,662.64		

Table 50: Laughlin AFB Status Quo Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.91 for Laughlin AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.7.2. Laughlin AFB Privatization

The Laughlin AFB privatization estimate included BAH, Moves, Manpower, and Project Management. The complete estimate for the privatization alternative is shown in Table 51, and totaled \$72,091,445.19.

Laughlin AFB Privatization			
BAH	Moves	Manpower	Proj Mgt
\$ 1,265,770.61	\$ 1,028,584.91	\$ 206,260.93	\$ 504,602.21
\$ 1,242,277.42	\$ 353,395.94	\$ 202,432.65	\$ 153,391.87
\$ 1,221,032.68	\$ 347,420.64	\$ 198,970.75	\$ 150,768.64
\$ 1,203,383.74	\$ 342,469.48	\$ 196,094.81	\$ 148,589.42
\$ 1,185,989.90	\$ 337,837.04	\$ 193,260.43	\$ 146,441.69
\$ 1,168,847.48	\$ 333,267.27	\$ 190,467.03	\$ 144,325.01
\$ 1,151,952.83	\$ 328,759.30	\$ 187,714.00	\$ 142,238.92
\$ 1,135,302.38	\$ 324,312.32	\$ 185,000.76	\$ 140,182.98
\$ 1,118,892.60	\$ 319,925.48	\$ 182,326.74	\$ 138,156.76
\$ 1,102,720.01	\$ 315,597.99	\$ 179,691.37	\$ 136,159.83
\$ 1,086,781.18	\$ 311,329.03	\$ 177,094.09	\$ 134,191.76
\$ 1,071,072.73	\$ 307,117.82	\$ 174,534.35	\$ 132,252.14
\$ 1,055,591.33	\$ 302,963.57	\$ 172,011.62	\$ 130,340.55
\$ 1,040,333.70	\$ 298,865.51	\$ 169,525.34	\$ 128,456.60
\$ 1,025,296.61	\$ 294,822.88	\$ 167,075.00	\$ 126,599.87
\$ 1,010,476.86	\$ 290,834.94	\$ 164,660.08	\$ 124,769.98
\$ 995,871.32	\$ 286,900.94	\$ 162,280.07	\$ 122,966.54
\$ 981,476.89	\$ 283,020.16	\$ 159,934.46	\$ 121,189.17
\$ 967,290.52	\$ 279,191.86	\$ 157,622.75	\$ 119,437.49
\$ 953,309.20	\$ 275,415.36	\$ 155,344.45	\$ 117,711.13
\$ 939,529.97	\$ 271,689.93	\$ 153,099.09	\$ 116,009.72
\$ 925,949.90	\$ 268,014.90	\$ 150,886.18	\$ 114,332.90
\$ 912,566.12	\$ 264,389.58	\$ 148,705.25	\$ 112,680.32
\$ 899,375.79	\$ 260,813.29	\$ 146,555.85	\$ 111,051.63
\$ 886,376.12	\$ 257,285.38	\$ 144,437.52	\$ 109,446.48
\$ 873,564.35	\$ 253,805.19	\$ 142,349.80	\$ 107,864.53
\$ 860,937.75	\$ 250,372.08	\$ 140,292.26	\$ 106,305.44
\$ 848,493.67	\$ 246,985.40	\$ 138,264.46	\$ 104,768.89
\$ 836,229.45	\$ 243,644.54	\$ 136,265.97	\$ 103,254.55
\$ 824,142.50	\$ 240,348.86	\$ 134,296.37	\$ 101,762.10
\$ 812,230.26	\$ 237,097.77	\$ 132,355.24	\$ 272,219.02
\$ 800,490.20	\$ 233,890.65	\$ 130,442.16	\$ 98,841.60
\$ 788,919.83	\$ 230,726.91	\$ 128,556.73	\$ 97,412.93
\$ 777,516.69	\$ 227,605.97	\$ 126,698.56	\$ 96,004.91
\$ 766,278.39	\$ 224,527.24	\$ 124,867.25	\$ 94,617.25
\$ 755,202.52	\$ 221,490.15	\$ 123,062.40	\$ 93,249.64
\$ 744,286.74	\$ 218,494.15	\$ 121,283.65	\$ 91,901.80
\$ 733,528.74	\$ 215,538.68	\$ 119,530.60	\$ 90,573.44
\$ 722,926.24	\$ 212,623.18	\$ 117,802.89	\$ 89,264.28
\$ 712,476.98	\$ 209,747.12	\$ 116,100.16	\$ 87,974.05
\$ 702,178.77	\$ 206,909.96	\$ 114,422.03	\$ 86,702.46
\$ 692,029.40	\$ 204,111.17	\$ 112,768.16	\$ 85,449.26
\$ 682,026.73	\$ 201,350.25	\$ 111,138.20	\$ 84,214.16
\$ 672,168.65	\$ 198,626.67	\$ 109,531.80	\$ 82,996.92
\$ 662,453.05	\$ 195,939.93	\$ 107,948.61	\$ 81,797.28
\$ 652,877.88	\$ 193,289.54	\$ 106,388.31	\$ 80,614.97
\$ 643,441.12	\$ 190,674.99	\$ 104,850.56	\$ 79,449.75
\$ 634,140.75	\$ 188,095.82	\$ 103,335.04	\$ 78,301.38
\$ 624,974.81	\$ 185,551.52	\$ 101,841.43	\$ 77,169.60
\$ 615,941.36	\$ 183,041.65	\$ 100,369.40	\$ 76,054.18
\$ 44,986,924.69	\$ 13,698,714.90	\$ 7,330,747.59	\$6,075,058.01
	Laughlin Total NPV =	\$ 72,091,445.19	

Table 51: Laughlin AFB Privatization Estimate

As previously discussed, Scoring is assumed to be zero in the cost estimate model to create the most conservative estimate possible. The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.91 for Laughlin AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.7.3. Laughlin AFB Identical FSRM

The Laughlin AFB identical FSRM estimate included BAH, FSRM Renovation #1, O&M, Utilities, Moves, Manpower, and Out Year Renovation. The complete estimate for the identical FSRM alternative is shown in Table 52, and totaled \$47,730,835.00.

Laughlin AFB Identical FSRM						
BAH	FSRM Reno 1	O&M	Utilities	Moves	Manpower	Out Year Reno
\$ 1,266,044.75	\$ 1,285,308.94	\$ 433,250.80	\$ 40,697.59	\$ 1,028,584.91	\$ 284,978.28	
\$ 62,140.17		\$ 426,971.80	\$ 40,107.77	\$ 353,395.94	\$ 279,688.97	
\$ 61,051.63		\$ 420,783.81	\$ 39,526.49	\$ 347,420.64	\$ 274,905.88	
\$ 60,169.19		\$ 414,685.49	\$ 38,953.65	\$ 342,469.48	\$ 270,932.36	
\$ 59,299.50		\$ 408,675.56	\$ 38,389.10	\$ 337,837.04	\$ 267,016.28	
\$ 58,442.37		\$ 402,752.72	\$ 37,832.74	\$ 333,267.27	\$ 263,156.80	
\$ 57,597.64		\$ 396,915.73	\$ 37,284.44	\$ 328,759.30	\$ 259,353.10	
\$ 56,765.12		\$ 391,163.32	\$ 36,744.08	\$ 324,312.32	\$ 255,604.38	
\$ 55,944.63		\$ 385,494.29	\$ 36,211.56	\$ 319,925.48	\$ 251,909.85	
\$ 55,136.00		\$ 379,907.42	\$ 35,686.75	\$ 315,597.99	\$ 248,268.72	
\$ 54,339.06		\$ 374,401.51	\$ 35,169.55	\$ 311,329.03	\$ 244,680.22	
\$ 53,553.64		\$ 368,975.40	\$ 34,659.85	\$ 307,117.82	\$ 241,143.58	
\$ 52,779.57		\$ 363,627.93	\$ 34,157.53	\$ 302,963.57	\$ 237,658.07	
\$ 52,016.68		\$ 358,357.96	\$ 33,662.50	\$ 298,865.51	\$ 234,222.93	
\$ 51,264.83		\$ 353,164.37	\$ 33,174.63	\$ 294,822.88	\$ 230,837.45	
\$ 50,523.84		\$ 348,046.05	\$ 32,693.84	\$ 290,834.94	\$ 227,500.90	
\$ 49,793.57		\$ 343,001.90	\$ 32,220.02	\$ 286,900.94	\$ 224,212.58	
\$ 49,073.84		\$ 338,030.86	\$ 31,753.06	\$ 283,020.16	\$ 220,971.79	
\$ 48,364.53		\$ 333,131.86	\$ 31,292.87	\$ 279,191.86	\$ 217,777.84	
\$ 47,665.46		\$ 328,303.86	\$ 30,839.35	\$ 275,415.36	\$ 214,630.05	
\$ 46,976.50		\$ 323,545.84	\$ 30,392.41	\$ 271,689.93	\$ 211,527.77	
\$ 46,297.49		\$ 318,856.76	\$ 29,951.94	\$ 268,014.90	\$ 208,470.32	
\$ 45,628.31		\$ 314,235.65	\$ 29,517.85	\$ 264,389.58	\$ 205,457.07	
\$ 44,968.79		\$ 309,681.51	\$ 29,090.06	\$ 260,813.29	\$ 202,487.37	
\$ 44,318.81		\$ 305,193.37	\$ 28,668.46	\$ 257,285.38	\$ 199,560.60	
\$ 43,678.22		\$ 300,770.28	\$ 28,252.98	\$ 253,805.19	\$ 196,676.13	
\$ 43,046.89		\$ 296,411.29	\$ 27,843.51	\$ 250,372.08	\$ 193,833.35	
\$ 42,424.68		\$ 292,115.48	\$ 27,439.98	\$ 246,985.40	\$ 191,031.66	
\$ 41,811.47		\$ 287,881.92	\$ 27,042.30	\$ 243,644.54	\$ 188,270.47	
\$ 41,207.13		\$ 283,709.72	\$ 26,650.38	\$ 240,348.86	\$ 185,549.19	
\$ 40,611.51		\$ 279,597.98	\$ 26,264.15	\$ 914,519.96	\$ 182,867.24	\$ 829,472.87
\$ 40,024.51		\$ 275,545.84	\$ 25,883.51	\$ 233,890.65	\$ 180,224.06	
\$ 39,445.99		\$ 271,552.42	\$ 25,508.38	\$ 230,726.91	\$ 177,619.08	
\$ 38,875.83		\$ 267,616.88	\$ 25,138.70	\$ 227,605.97	\$ 175,051.76	
\$ 38,313.92		\$ 263,738.37	\$ 24,774.37	\$ 224,527.24	\$ 172,521.54	
\$ 755,202.52		\$ 259,916.08	\$ 24,415.32	\$ 221,490.15	\$ 170,027.89	
\$ 37,214.34		\$ 256,149.18	\$ 24,061.47	\$ 218,494.15	\$ 167,570.29	
\$ 36,676.44		\$ 252,436.87	\$ 23,712.76	\$ 215,538.68	\$ 165,148.21	
\$ 36,146.31		\$ 248,778.36	\$ 23,369.09	\$ 212,623.18	\$ 162,761.14	
\$ 35,623.85		\$ 245,172.88	\$ 23,030.41	\$ 209,747.12	\$ 160,408.58	
\$ 35,108.94		\$ 241,619.65	\$ 22,696.64	\$ 206,909.96	\$ 158,090.02	
\$ 34,601.47		\$ 238,117.92	\$ 22,367.70	\$ 204,111.17	\$ 155,804.97	
\$ 34,101.34		\$ 234,666.93	\$ 22,043.53	\$ 201,350.25	\$ 153,552.94	
\$ 33,608.43		\$ 231,265.96	\$ 21,724.06	\$ 198,626.67	\$ 151,333.47	
\$ 33,122.65		\$ 227,914.28	\$ 21,409.22	\$ 195,939.93	\$ 149,146.08	
\$ 32,643.89		\$ 224,611.18	\$ 21,098.94	\$ 193,289.54	\$ 146,990.31	
\$ 32,172.06		\$ 221,355.94	\$ 20,793.16	\$ 190,674.99	\$ 144,865.70	
\$ 31,707.04		\$ 218,147.89	\$ 20,491.81	\$ 188,095.82	\$ 142,771.79	
\$ 31,248.74		\$ 214,986.32	\$ 20,194.83	\$ 185,551.52	\$ 140,708.15	
\$ 30,797.07		\$ 211,870.58	\$ 19,902.15	\$ 183,041.65	\$ 138,674.34	
\$ 4,169,571.15	\$ 1,285,308.94	\$ 15,487,105.98	\$ 1,454,787.44	\$ 14,376,137.10	\$ 10,128,451.54	\$ 829,472.87
		Laughlin Total NPV =	\$ 47,730,835.00			

Table 52: Laughlin AFB Identical FSRM Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.91 for Laughlin AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.8. Luke AFB Estimate

The Luke AFB cost data comes from all O&M costs from the years 2008-2015. Table 53 shows the O&M costs per year as well as the average over that period.

Luke Data	
Year	O&M Cost Data
2008	\$ 63,693.45
2009	\$ 80,537.71
2010	\$ 286,015.00
2011	\$ 526,720.97
2012	\$ 231,186.74
2013	\$ 293,218.04
2014	\$ 432,002.92
2015	\$ 306,901.67
Mean	\$ 277,534.56

Table 53: Luke AFB O&M Cost Data

Within the O&M cost data, the facility number and square footage for each facility associated with each O&M is provided and utilized to determine the costs for Luke AFB.

Table 54 details the Luke AFB initial costs.

Base	Facility	SF	New Construction Cost	Demolition Cost	New Dorm Cost	Full Renovation Cost	PRSNL	BAH	Utilities
Luke	133	23539	\$ 4,503,952.26	\$ 682,631.00	\$ 5,186,583.26	\$ 3,630,608.28	66	\$ 895,145.07	\$ 19,066.59
	528	34979	\$ 6,692,881.86	\$ 1,014,391.00	\$ 7,707,272.86	\$ 5,395,091.00	99	\$ 1,330,187.32	\$ 28,332.99
	530	34226	\$ 6,548,802.84	\$ 992,554.00	\$ 7,541,356.84	\$ 5,278,949.79	96	\$ 1,301,552.11	\$ 27,723.06
	542	29677	\$ 5,678,397.18	\$ 860,633.00	\$ 6,539,030.18	\$ 4,577,321.13	84	\$ 1,128,561.97	\$ 24,038.37
	546	42987	\$ 8,225,132.58	\$ 1,246,623.00	\$ 9,471,755.58	\$ 6,630,228.91	121	\$ 1,634,716.90	\$ 34,819.47
	634	22409	\$ 4,287,738.06	\$ 649,861.00	\$ 4,937,599.06	\$ 3,456,319.34	63	\$ 852,173.24	\$ 18,151.29
	635	24113	\$ 4,613,781.42	\$ 699,277.00	\$ 5,313,058.42	\$ 3,719,140.89	68	\$ 916,973.24	\$ 19,531.53
	636	23426	\$ 4,482,330.84	\$ 679,354.00	\$ 5,161,684.84	\$ 3,613,179.39	66	\$ 890,847.89	\$ 18,975.06
	637	23423	\$ 4,481,756.82	\$ 679,267.00	\$ 5,161,023.82	\$ 3,612,716.67	66	\$ 890,733.80	\$ 18,972.63
	640	35852	\$ 6,859,921.68	\$ 1,039,708.00	\$ 7,899,629.68	\$ 5,529,740.78	101	\$ 1,363,385.92	\$ 29,040.12

Table 54: Luke AFB Initial Costs

The new construction costs were determined by multiplying the square footage of each facility by the union dormitory per square footage cost of \$191.34 shown in Table 12 (RS Means, 2016). The Union price used to calculate the new construction costs was used based on the aforementioned assumption that the estimate should be as conservative as possible to ensure the integrity of the cost estimation model. The demolition price was calculated by multiplying the square footage by the average Air Force demolition cost of \$29.00 per square foot (UFC 3-730-01, 2011). The new construction cost was added to the demolition cost to determine the complete cost to construct a new dormitory. Since no new construction will be occurring in any phase (status quo, privatization, or identical FSRM), the full renovation cost is calculated by multiplying the new dorm cost by 70%. The 70% is the estimated cost for full renovation used by all accompanied housing privatization estimates, which drives its use in this model (AETC Group I, 2005). With the number of personnel in each existing dormitory not available, the number of personnel is determined by dividing the actual square footage of each facility by 355 square foot per person to accommodate the Dorms-4-Airmen construct (AFUHDG, 2016). BAH is determined by multiplying the number of personnel by the BAH rate for Luke AFB, which is \$1,125.00 per month or \$13,500.00 per year. Finally, the initial utilities costs are calculated by multiplying the facility square footage by the \$0.81 per square foot historical average for federal dormitories (DOE, 2016).

The initial Manpower calculation for Luke AFB is shown in Table 55.

Luke									
Grade Housing Office	Base Pay	Approx Benefits (32.85%)*	STATUS QUO		IDENTICAL FSRM		PRIVATIZATION		Military Grade Equivalent
			Positions	Funding	Positions	Funding	Positions	Funding	
GS-11/7	\$ 63,337.00	\$ 20,806.20	1	\$ 84,143.20	1	\$ 84,143.20	1	\$ 84,143.20	O-3
GS-9/10	\$ 56,706.00	\$ 18,627.92	1	\$ 75,333.92	1	\$ 75,333.92	1	\$ 75,333.92	O-2
GS-9/8	\$ 53,799.00	\$ 17,672.97	1	\$ 71,471.97	1	\$ 71,471.97	1	\$ 71,471.97	O-1
GS-7/10	\$ 46,362.00	\$ 15,229.92	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/9	\$ 45,173.00	\$ 14,839.33	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/5	\$ 40,418.00	\$ 13,277.31	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/4	\$ 39,229.00	\$ 12,886.73	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/3	\$ 38,040.00	\$ 12,496.14	1	\$ 50,536.14	1	\$ 50,536.14	0	\$ -	E-7
GS-5/8	\$ 35,512.00	\$ 11,665.69	1	\$ 47,177.69	1	\$ 47,177.69	0	\$ -	E-6
GS-4/4	\$ 28,305.00	\$ 9,298.19	4	\$ 150,412.77	4	\$ 150,412.77	0	\$ -	E-5
			9	\$ 479,075.70	9	\$ 479,075.70		\$ 230,949.10	

Table 55: Luke AFB Manpower Initial Costs

The number of personnel in the status quo and identical FSRM alternatives are based on the allotted personnel per number of individuals living in unaccompanied housing per installation. Luke AFB has 830 individuals occupying unaccompanied housing units, which earns one GS-11/7, one GS-9/10, one GS-9/8, one Air Force Master Sergeant, one Air Force Technical Sergeant and four Air Force Staff Sergeants (AFI 32-6005, 2013). In the privatization alternative, only Flight leadership will be retained to run the Asset Management Flight, which includes one GS-11/7, one GS-9/10, and one GS-9/8. The Luke AFB initial costs combined with the Luke AFB manpower initial cost calculations provide the basis for each calculation in the status quo, privatization, and identical FSRM alternative.

4.2.8.1. Luke AFB Status Quo

The Luke AFB status quo estimate included BAH, O&M, Utilities, Moves, and Manpower. The complete estimate for the status quo alternative is shown in Table 56, and totaled \$123,412,904.75.

Luke AFB Status Quo					
Year	BAH	O&M	Utilities	Moves	Manpower
1	\$ 549,929.75	\$ 268,804.99	\$ 231,144.58	\$ 1,918,195.72	\$ 456,073.86
2	\$ 539,834.43	\$ 264,909.27	\$ 227,794.66	\$ 1,882,982.46	\$ 447,608.96
3	\$ 530,706.79	\$ 261,070.00	\$ 224,493.28	\$ 1,851,144.59	\$ 439,954.19
4	\$ 523,143.58	\$ 257,286.38	\$ 221,239.76	\$ 1,824,763.55	\$ 433,595.05
5	\$ 516,067.24	\$ 253,557.59	\$ 218,033.39	\$ 1,800,080.76	\$ 427,327.82
6	\$ 509,086.62	\$ 249,882.84	\$ 214,873.48	\$ 1,775,731.84	\$ 421,151.18
7	\$ 502,200.42	\$ 246,261.35	\$ 211,759.37	\$ 1,751,712.28	\$ 415,063.81
8	\$ 495,407.37	\$ 242,692.35	\$ 208,690.40	\$ 1,728,017.62	\$ 409,064.44
9	\$ 488,706.21	\$ 239,175.07	\$ 205,665.90	\$ 1,704,643.47	\$ 403,151.78
10	\$ 482,095.69	\$ 235,708.76	\$ 202,685.23	\$ 1,681,585.49	\$ 397,324.58
11	\$ 475,574.59	\$ 232,292.69	\$ 199,747.77	\$ 1,658,839.40	\$ 391,581.61
12	\$ 469,141.70	\$ 228,926.13	\$ 196,852.87	\$ 1,636,401.00	\$ 385,921.64
13	\$ 462,795.82	\$ 225,608.36	\$ 193,999.93	\$ 1,614,266.10	\$ 380,343.49
14	\$ 456,535.78	\$ 222,338.67	\$ 191,188.34	\$ 1,592,430.62	\$ 374,845.97
15	\$ 450,360.42	\$ 219,116.38	\$ 188,417.49	\$ 1,570,890.50	\$ 369,427.90
16	\$ 444,268.59	\$ 215,940.78	\$ 185,686.80	\$ 1,549,641.74	\$ 364,088.15
17	\$ 438,259.16	\$ 212,811.20	\$ 182,995.69	\$ 1,528,680.40	\$ 358,825.58
18	\$ 432,331.01	\$ 209,726.98	\$ 180,343.58	\$ 1,508,002.60	\$ 353,639.08
19	\$ 426,483.06	\$ 206,687.46	\$ 177,729.90	\$ 1,487,604.49	\$ 348,527.54
20	\$ 420,714.20	\$ 203,691.99	\$ 175,154.11	\$ 1,467,482.31	\$ 343,489.89
21	\$ 415,023.38	\$ 200,739.93	\$ 172,615.64	\$ 1,447,632.30	\$ 338,525.05
22	\$ 409,409.54	\$ 197,830.65	\$ 170,113.97	\$ 1,428,050.80	\$ 333,631.97
23	\$ 403,871.63	\$ 194,963.54	\$ 167,648.55	\$ 1,408,734.17	\$ 328,809.62
24	\$ 398,408.64	\$ 192,137.99	\$ 165,218.86	\$ 1,389,678.83	\$ 324,056.97
25	\$ 393,019.53	\$ 189,353.38	\$ 162,824.38	\$ 1,370,881.25	\$ 319,373.02
26	\$ 387,703.33	\$ 186,609.13	\$ 160,464.61	\$ 1,352,337.92	\$ 314,756.77
27	\$ 382,459.03	\$ 183,904.64	\$ 158,139.03	\$ 1,334,045.43	\$ 310,207.24
28	\$ 377,285.67	\$ 181,239.36	\$ 155,847.16	\$ 1,316,000.37	\$ 305,723.47
29	\$ 372,182.29	\$ 178,612.70	\$ 153,588.51	\$ 1,298,199.40	\$ 301,304.51
30	\$ 367,147.94	\$ 176,024.11	\$ 151,362.59	\$ 1,280,639.22	\$ 296,949.42
31	\$ 362,181.69	\$ 173,473.04	\$ 149,168.93	\$ 1,263,316.56	\$ 292,657.29
32	\$ 357,282.61	\$ 170,958.94	\$ 147,007.06	\$ 1,246,228.22	\$ 288,427.19
33	\$ 352,449.80	\$ 168,481.27	\$ 144,876.52	\$ 1,229,371.03	\$ 284,258.23
34	\$ 347,682.37	\$ 166,039.51	\$ 142,776.86	\$ 1,212,741.85	\$ 280,149.53
35	\$ 342,979.42	\$ 163,633.14	\$ 140,707.63	\$ 1,196,337.62	\$ 276,100.22
36	\$ 338,340.08	\$ 161,261.65	\$ 138,668.39	\$ 1,180,155.27	\$ 272,109.44
37	\$ 333,763.50	\$ 158,924.52	\$ 136,658.71	\$ 1,164,191.82	\$ 268,176.34
38	\$ 329,248.83	\$ 156,621.27	\$ 134,678.14	\$ 1,148,444.30	\$ 264,300.09
39	\$ 324,795.22	\$ 154,351.40	\$ 132,726.29	\$ 1,132,909.78	\$ 260,479.87
40	\$ 320,401.85	\$ 152,114.42	\$ 130,802.72	\$ 1,117,585.40	\$ 256,714.86
41	\$ 316,067.92	\$ 149,909.86	\$ 128,907.03	\$ 1,102,468.30	\$ 253,004.28
42	\$ 311,792.60	\$ 147,737.26	\$ 127,038.81	\$ 1,087,555.69	\$ 249,347.33
43	\$ 307,575.12	\$ 145,596.14	\$ 125,197.67	\$ 1,072,844.79	\$ 245,743.24
44	\$ 303,414.68	\$ 143,486.05	\$ 123,383.21	\$ 1,058,332.88	\$ 242,191.24
45	\$ 299,310.52	\$ 141,406.54	\$ 121,595.04	\$ 1,044,017.27	\$ 238,690.58
46	\$ 295,261.88	\$ 139,357.17	\$ 119,832.80	\$ 1,029,895.29	\$ 235,240.52
47	\$ 291,268.00	\$ 137,337.50	\$ 118,096.09	\$ 1,015,964.34	\$ 231,840.33
48	\$ 287,328.14	\$ 135,347.10	\$ 116,384.55	\$ 1,002,221.83	\$ 228,489.28
49	\$ 283,441.57	\$ 133,385.55	\$ 114,697.82	\$ 988,665.21	\$ 225,186.68
50	\$ 279,607.58	\$ 131,452.43	\$ 113,035.53	\$ 975,291.96	\$ 221,931.80
Total =	\$ 19,904,346.79	\$ 9,608,779.41	\$ 8,262,559.63	\$ 69,427,836.00	\$ 16,209,382.92
		Luke Total NPV =	\$ 123,412,904.75		

Table 56: Luke AFB Status Quo Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.94 for Luke AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.8.2. Luke AFB Privatization

The Luke AFB privatization estimate included BAH, Moves, Manpower, and Project Management. The complete estimate for the privatization alternative is shown in Table 57, and totaled \$481,733,803.98.

Luke AFB Privatization			
BAH	Moves	Manpower	Proj Mgt
\$ 10,996,213.49	\$ 3,006,714.45	\$ 219,860.55	\$ 537,872.69
\$ 10,792,119.52	\$ 3,049,848.60	\$ 215,779.85	\$ 467,158.90
\$ 10,607,558.63	\$ 3,025,082.28	\$ 212,089.71	\$ 459,169.81
\$ 10,454,235.85	\$ 2,665,984.64	\$ 209,024.14	\$ 452,532.92
\$ 10,303,129.22	\$ 2,834,787.00	\$ 206,002.88	\$ 445,991.96
\$ 10,154,206.69	\$ 1,775,731.84	\$ 203,025.29	\$ 153,840.94
\$ 10,007,436.71	\$ 1,751,712.28	\$ 200,090.74	\$ 151,617.31
\$ 9,862,788.16	\$ 1,728,017.62	\$ 197,198.61	\$ 149,425.81
\$ 9,720,230.37	\$ 1,704,643.47	\$ 194,348.28	\$ 147,266.00
\$ 9,579,733.13	\$ 1,681,585.49	\$ 191,539.15	\$ 145,137.40
\$ 9,441,266.65	\$ 1,658,839.40	\$ 188,770.62	\$ 143,039.57
\$ 9,304,801.57	\$ 1,636,401.00	\$ 186,042.11	\$ 140,972.06
\$ 9,170,308.98	\$ 1,614,266.10	\$ 183,353.04	\$ 138,934.43
\$ 9,037,760.36	\$ 1,592,430.62	\$ 180,702.84	\$ 136,926.26
\$ 8,907,127.61	\$ 1,570,890.50	\$ 178,090.94	\$ 134,947.11
\$ 8,778,383.04	\$ 1,549,641.74	\$ 175,516.79	\$ 132,996.57
\$ 8,651,499.36	\$ 1,528,680.40	\$ 172,979.85	\$ 131,074.23
\$ 8,526,449.67	\$ 1,508,002.60	\$ 170,479.59	\$ 129,179.67
\$ 8,403,207.46	\$ 1,487,604.49	\$ 168,015.46	\$ 127,312.49
\$ 8,281,746.61	\$ 1,467,482.31	\$ 165,586.94	\$ 125,472.30
\$ 8,162,041.36	\$ 1,447,632.30	\$ 163,193.53	\$ 123,658.71
\$ 8,044,066.35	\$ 1,428,050.80	\$ 160,834.71	\$ 121,871.34
\$ 7,927,796.56	\$ 1,408,734.17	\$ 158,509.99	\$ 120,109.79
\$ 7,813,207.35	\$ 1,389,678.83	\$ 156,218.87	\$ 118,373.71
\$ 7,700,274.42	\$ 1,370,881.25	\$ 153,960.87	\$ 116,662.73
\$ 7,588,973.83	\$ 1,352,337.92	\$ 151,735.50	\$ 114,976.47
\$ 7,479,282.00	\$ 1,334,045.43	\$ 149,542.30	\$ 113,314.59
\$ 7,371,175.66	\$ 1,316,000.37	\$ 147,380.80	\$ 111,676.73
\$ 7,264,631.90	\$ 1,298,199.40	\$ 145,250.54	\$ 110,062.54
\$ 7,159,628.14	\$ 1,280,639.22	\$ 143,151.08	\$ 108,471.69
\$ 7,056,142.12	\$ 1,263,316.56	\$ 141,081.95	\$ 290,167.53
\$ 6,954,151.89	\$ 1,246,228.22	\$ 139,042.74	\$ 285,973.41
\$ 6,853,635.84	\$ 1,229,371.03	\$ 137,033.00	\$ 281,839.92
\$ 6,754,572.66	\$ 1,212,741.85	\$ 135,052.31	\$ 277,766.18
\$ 6,656,941.35	\$ 1,196,337.62	\$ 133,100.25	\$ 273,751.32
\$ 6,560,721.21	\$ 1,180,155.27	\$ 131,176.41	\$ 99,397.97
\$ 6,465,891.85	\$ 1,164,191.82	\$ 129,280.37	\$ 97,961.26
\$ 6,372,433.16	\$ 1,148,444.30	\$ 127,411.74	\$ 96,545.32
\$ 6,280,325.33	\$ 1,132,909.78	\$ 125,570.11	\$ 95,149.84
\$ 6,189,548.84	\$ 1,117,585.40	\$ 123,755.11	\$ 93,774.54
\$ 6,100,084.45	\$ 1,102,468.30	\$ 121,966.34	\$ 92,419.11
\$ 6,011,913.18	\$ 1,087,555.69	\$ 120,203.43	\$ 91,083.27
\$ 5,925,016.34	\$ 1,072,844.79	\$ 118,465.99	\$ 89,766.75
\$ 5,839,375.53	\$ 1,058,332.88	\$ 116,753.67	\$ 88,469.25
\$ 5,754,972.57	\$ 1,044,017.27	\$ 115,066.10	\$ 87,190.50
\$ 5,671,789.59	\$ 1,029,895.29	\$ 113,402.93	\$ 85,930.24
\$ 5,589,808.94	\$ 1,015,964.34	\$ 111,763.79	\$ 84,688.20
\$ 5,509,013.25	\$ 1,002,221.83	\$ 110,148.34	\$ 83,464.11
\$ 5,429,385.38	\$ 988,665.21	\$ 108,556.25	\$ 82,257.71
\$ 5,350,908.47	\$ 975,291.96	\$ 106,987.16	\$ 81,068.75
\$ 390,817,912.59	\$ 74,733,085.89	\$ 7,814,093.59	\$ 8,368,711.91
	Luke Total NPV =	\$ 481,733,803.98	

Table 57: Luke AFB Privatization Estimate

As previously discussed, Scoring is assumed to be zero in the cost estimate model to create the most conservative estimate possible. The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.97 for Luke AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.8.3. Luke AFB Identical FSRM

The Luke AFB identical FSRM estimate included BAH, FSRM Renovation #1, O&M, Utilities, Moves, Manpower, and Out Year Renovation. The complete estimate for the identical FSRM alternative is shown in Table 58, and totaled \$170,126,435.27.

Luke AFB Identical FSRM						
BAH	FSRM Reno 1	O&M	Utilities	Moves	Manpower	Out Year Reno
\$ 2,734,410.64	\$ 1,449,885.24	\$ 268,804.99	\$ 231,144.58	\$ 3,006,714.45	\$ 456,073.86	
\$ 2,881,545.87	\$ 1,560,361.49	\$ 264,909.27	\$ 227,794.66	\$ 3,049,848.60	\$ 447,608.96	
\$ 2,884,820.96	\$ 1,573,674.77	\$ 261,070.00	\$ 224,493.28	\$ 3,025,082.28	\$ 439,954.19	
\$ 2,209,512.97	\$ 1,127,388.66	\$ 257,286.38	\$ 221,239.76	\$ 2,665,984.64	\$ 433,595.05	
\$ 2,587,979.70	\$ 1,385,335.63	\$ 253,557.59	\$ 218,033.39	\$ 2,834,787.00	\$ 427,327.82	
\$ 507,710.33		\$ 249,882.84	\$ 214,873.48	\$ 1,775,731.84	\$ 421,151.18	
\$ 500,371.84		\$ 246,261.35	\$ 211,759.37	\$ 1,751,712.28	\$ 415,063.81	
\$ 493,139.41		\$ 242,692.35	\$ 208,690.40	\$ 1,728,017.62	\$ 409,064.44	
\$ 486,011.52		\$ 239,175.07	\$ 205,665.90	\$ 1,704,643.47	\$ 403,151.78	
\$ 478,986.66		\$ 235,708.76	\$ 202,685.23	\$ 1,681,585.49	\$ 397,324.58	
\$ 472,063.33		\$ 232,292.69	\$ 199,747.77	\$ 1,658,839.40	\$ 391,581.61	
\$ 465,240.08		\$ 228,926.13	\$ 196,852.87	\$ 1,636,401.00	\$ 385,921.64	
\$ 458,515.45		\$ 225,608.36	\$ 193,999.93	\$ 1,614,266.10	\$ 380,343.49	
\$ 451,888.02		\$ 222,338.67	\$ 191,188.34	\$ 1,592,430.62	\$ 374,845.97	
\$ 445,356.38		\$ 219,116.38	\$ 188,417.49	\$ 1,570,890.50	\$ 369,427.90	
\$ 438,919.15		\$ 215,940.78	\$ 185,686.80	\$ 1,549,641.74	\$ 364,088.15	
\$ 432,574.97		\$ 212,811.20	\$ 182,995.69	\$ 1,528,680.40	\$ 358,825.58	
\$ 426,322.48		\$ 209,726.98	\$ 180,343.58	\$ 1,508,002.60	\$ 353,639.08	
\$ 420,160.37		\$ 206,687.46	\$ 177,729.90	\$ 1,487,604.49	\$ 348,527.54	
\$ 414,087.33		\$ 203,691.99	\$ 175,154.11	\$ 1,467,482.31	\$ 343,489.89	
\$ 408,102.07		\$ 200,739.93	\$ 172,615.64	\$ 1,447,632.30	\$ 338,525.05	
\$ 402,203.32		\$ 197,830.65	\$ 170,113.97	\$ 1,428,050.80	\$ 333,631.97	
\$ 396,389.83		\$ 194,963.54	\$ 167,648.55	\$ 1,408,734.17	\$ 328,809.62	
\$ 390,660.37		\$ 192,137.99	\$ 165,218.86	\$ 1,389,678.83	\$ 324,056.97	
\$ 385,013.72		\$ 189,353.38	\$ 162,824.38	\$ 1,370,881.25	\$ 319,373.02	
\$ 379,448.69		\$ 186,609.13	\$ 160,464.61	\$ 1,352,337.92	\$ 314,756.77	
\$ 373,964.10		\$ 183,904.64	\$ 158,139.03	\$ 1,334,045.43	\$ 310,207.24	
\$ 368,558.78		\$ 181,239.36	\$ 155,847.16	\$ 1,316,000.37	\$ 305,723.47	
\$ 363,231.60		\$ 178,612.70	\$ 153,588.51	\$ 1,298,199.40	\$ 301,304.51	
\$ 357,981.41		\$ 176,024.11	\$ 151,362.59	\$ 1,280,639.22	\$ 296,949.42	
\$ 352,807.11		\$ 173,473.04	\$ 149,168.93	\$ 1,980,210.94	\$ 292,657.29	\$ 935,682.03
\$ 347,707.59		\$ 170,958.94	\$ 147,007.06	\$ 2,018,503.87	\$ 288,427.19	\$ 1,006,977.77
\$ 342,681.79		\$ 168,481.27	\$ 144,876.52	\$ 2,008,999.47	\$ 284,258.23	\$ 1,015,569.48
\$ 337,728.63		\$ 166,039.51	\$ 142,776.86	\$ 1,771,819.24	\$ 280,149.53	\$ 727,559.17
\$ 332,847.07		\$ 163,633.14	\$ 140,707.63	\$ 1,884,005.65	\$ 276,100.22	\$ 894,025.00
\$ 3,599,307.04		\$ 161,261.65	\$ 138,668.39	\$ 1,180,155.27	\$ 272,109.44	
\$ 3,665,460.02		\$ 158,924.52	\$ 136,658.71	\$ 1,164,191.82	\$ 268,176.34	
\$ 3,644,770.45		\$ 156,621.27	\$ 134,678.14	\$ 1,148,444.30	\$ 264,300.09	
\$ 3,211,450.50		\$ 154,351.40	\$ 132,726.29	\$ 1,132,909.78	\$ 260,479.87	
\$ 3,411,579.38		\$ 152,114.42	\$ 130,802.72	\$ 1,117,585.40	\$ 256,714.86	
\$ 305,004.22		\$ 149,909.86	\$ 128,907.03	\$ 1,102,468.30	\$ 253,004.28	
\$ 300,595.66		\$ 147,737.26	\$ 127,038.81	\$ 1,087,555.69	\$ 249,347.33	
\$ 296,250.82		\$ 145,596.14	\$ 125,197.67	\$ 1,072,844.79	\$ 245,743.24	
\$ 291,968.78		\$ 143,486.05	\$ 123,383.21	\$ 1,058,332.88	\$ 242,191.24	
\$ 287,748.63		\$ 141,406.54	\$ 121,595.04	\$ 1,044,017.27	\$ 238,690.58	
\$ 283,589.48		\$ 139,357.17	\$ 119,832.80	\$ 1,029,895.29	\$ 235,240.52	
\$ 279,490.45		\$ 137,337.50	\$ 118,096.09	\$ 1,015,964.34	\$ 231,840.33	
\$ 275,450.66		\$ 135,347.10	\$ 116,384.55	\$ 1,002,221.83	\$ 228,489.28	
\$ 271,469.27		\$ 133,385.55	\$ 114,697.82	\$ 988,665.21	\$ 225,186.68	
\$ 267,545.42		\$ 131,452.43	\$ 113,035.53	\$ 975,291.96	\$ 221,931.80	
\$ 46,120,624.30	\$ 7,096,645.78	\$ 9,608,779.41	\$ 8,262,559.63	\$ 78,248,629.79	\$ 16,209,382.92	\$ 4,579,813.44
		Luke Total NPV =	\$ 170,126,435.27			

Table 58: Luke AFB Identical FSRM Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.97 for Luke AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.9. Maxwell AFB Estimate

The Maxwell AFB cost data comes from all O&M costs from the years 2008-2015. Table 59 shows the O&M costs per year as well as the average over that period.

Maxwell Data	
Year	O&M Cost Data
2008	\$ 874,301.71
2009	\$ 85,402.60
2010	\$ 485,481.14
2011	\$ 1,701,056.91
2012	\$ 6,799,882.99
2013	\$ 3,609,265.10
2014	\$ 646,231.26
2015	\$ 251,044.93
Mean	\$ 1,806,583.33

Table 59: Maxwell AFB O&M Cost Data

Within the O&M cost data, the facility number and square footage for each facility associated with each O&M is provided and utilized to determine the costs for Maxwell AFB. Table 60 details the Maxwell AFB initial costs.

Base	Facility	SF	New Construction Cost	Demolition Cost	New Dorm Cost	Full Renovation Cost	PRSNL	BAH	Utilities
Maxwell	696	29750	\$ 5,692,365.00	\$ 862,750.00	\$ 6,555,115.00	\$ 4,588,580.50	84	\$ 989,543.66	\$ 24,097.50
	697	29750	\$ 5,692,365.00	\$ 862,750.00	\$ 6,555,115.00	\$ 4,588,580.50	84	\$ 989,543.66	\$ 24,097.50
	1016	33645	\$ 6,437,634.30	\$ 975,705.00	\$ 7,413,339.30	\$ 5,189,337.51	95	\$ 1,119,099.04	\$ 27,252.45
	1017	122133	\$ 23,368,928.22	\$ 3,541,857.00	\$ 26,910,785.22	\$ 18,837,549.65	344	\$ 4,062,384.41	\$ 98,927.73
	1410	31089	\$ 5,948,569.26	\$ 901,581.00	\$ 6,850,150.26	\$ 4,795,105.18	88	\$ 1,034,081.44	\$ 25,182.09
	1411	31089	\$ 5,948,569.26	\$ 901,581.00	\$ 6,850,150.26	\$ 4,795,105.18	88	\$ 1,034,081.44	\$ 25,182.09

Table 60: Maxwell AFB Initial Costs

The new construction costs were determined by multiplying the square footage of each facility by the union dormitory per square footage cost of \$191.34 shown in Table 12 (RS Means, 2016). The Union price used to calculate the new construction costs was used based on the aforementioned assumption that the estimate should be as conservative as possible to ensure the integrity of the cost estimation model. The demolition price was calculated by multiplying the square footage by the average Air Force demolition cost of \$29.00 per square foot (UFC 3-730-01, 2011). The new construction cost was added to the demolition cost to determine the complete cost to construct a new dormitory. Since no new construction will be occurring in any phase (status quo, privatization, or identical FSRM), the full renovation cost is calculated by multiplying the new dorm cost by 70%. The 70% is the estimated cost for full renovation used by all accompanied housing privatization estimates, which drives its use in this model (AETC Group I, 2005). With the number of personnel in each existing dormitory not available, the number of personnel is determined by dividing the actual square footage of each facility by 355 square foot per person to accommodate the Dorms-4-Airmen construct (AFUHDG, 2016). BAH is determined by multiplying the number of personnel by the BAH rate for Maxwell AFB, which is \$985.00 per month or \$11,808.00 per year. Finally, the initial utilities costs are calculated by multiplying the facility square footage by the \$0.81 per square foot historical average for federal dormitories (DOE, 2016).

The initial Manpower calculation for Maxwell AFB is shown in Table 61.

Maxwell									
Grade Housing Office	Base Pay	Approx Benefits (32.85%)*	STATUS QUO		IDENTICAL FSRM		PRIVATIZATION		Military Grade Equivalent
			Positions	Funding	Positions	Funding	Positions	Funding	
GS-11/7	\$ 63,337.00	\$ 20,806.20	1	\$ 84,143.20	1	\$ 84,143.20	1	\$ 84,143.20	O-3
GS-9/10	\$ 56,706.00	\$ 18,627.92	1	\$ 75,333.92	1	\$ 75,333.92	1	\$ 75,333.92	O-2
GS-9/8	\$ 53,799.00	\$ 17,672.97	1	\$ 71,471.97	1	\$ 71,471.97	1	\$ 71,471.97	O-1
GS-7/10	\$ 46,362.00	\$ 15,229.92	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/9	\$ 45,173.00	\$ 14,839.33	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/5	\$ 40,418.00	\$ 13,277.31	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/4	\$ 39,229.00	\$ 12,886.73	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/3	\$ 38,040.00	\$ 12,496.14	1	\$ 50,536.14	0	\$ -	0	\$ -	E-7
GS-5/8	\$ 35,512.00	\$ 11,665.69	1	\$ 47,177.69	1	\$ 47,177.69	0	\$ -	E-6
GS-4/4	\$ 28,305.00	\$ 9,298.19	4	\$ 150,412.77	4	\$ 150,412.77	0	\$ -	E-5
			9	\$ 479,075.70	8	\$ 428,539.56		\$ 230,949.10	

Table 61: Maxwell AFB Manpower Initial Costs

The number of personnel in the status quo and identical FSRM alternatives are based on the allotted personnel per number of individuals living in unaccompanied housing per installation. Maxwell AFB has 782 individuals occupying unaccompanied housing units, which earns one GS-11/7, one GS-9/10, one GS-9/8, one Air Force Master Sergeant, one Air Force Technical Sergeant and four Air Force Staff Sergeants (AFI 32-6005, 2013). In the privatization alternative, only Flight leadership will be retained to run the Asset Management Flight, which includes one GS-11/7, one GS-9/10, and one GS-9/8. The Maxwell AFB initial costs combined with the Maxwell AFB manpower initial cost calculations provide the basis for each calculation in the status quo, privatization, and identical FSRM alternative.

4.2.9.1 Maxwell AFB Status Quo

The Maxwell AFB status quo estimate included BAH, O&M, Utilities, Moves, and Manpower. The complete estimate for the status quo alternative is shown in Table 62, and totaled \$156,715,305.72.

Maxwell AFB Status Quo					
Year	BAH	O&M	Utilities	Moves	Manpower
1	\$ 452,965.86	\$ 1,515,255.27	\$ 188,498.09	\$ 1,806,377.84	\$ 394,950.56
2	\$ 444,650.55	\$ 1,493,295.05	\$ 185,766.23	\$ 1,773,217.29	\$ 387,620.13
3	\$ 437,132.30	\$ 1,471,653.09	\$ 183,073.97	\$ 1,743,235.35	\$ 380,991.26
4	\$ 430,902.64	\$ 1,450,324.78	\$ 180,420.72	\$ 1,718,392.14	\$ 375,484.37
5	\$ 425,074.01	\$ 1,429,305.58	\$ 177,805.93	\$ 1,695,148.19	\$ 370,057.08
6	\$ 419,324.21	\$ 1,408,591.01	\$ 175,229.03	\$ 1,672,218.65	\$ 364,708.24
7	\$ 413,652.19	\$ 1,388,176.65	\$ 172,689.48	\$ 1,649,599.27	\$ 359,436.71
8	\$ 408,056.90	\$ 1,368,058.15	\$ 170,186.73	\$ 1,627,285.85	\$ 354,241.37
9	\$ 402,537.29	\$ 1,348,231.22	\$ 167,720.26	\$ 1,605,274.25	\$ 349,121.13
10	\$ 397,092.34	\$ 1,328,691.63	\$ 165,289.53	\$ 1,583,560.40	\$ 344,074.89
11	\$ 391,721.04	\$ 1,309,435.23	\$ 162,894.03	\$ 1,562,140.26	\$ 339,101.60
12	\$ 386,422.40	\$ 1,290,457.91	\$ 160,533.25	\$ 1,541,009.86	\$ 334,200.19
13	\$ 381,195.43	\$ 1,271,755.62	\$ 158,206.68	\$ 1,520,165.28	\$ 329,369.62
14	\$ 376,039.16	\$ 1,253,324.38	\$ 155,913.83	\$ 1,499,602.66	\$ 324,608.88
15	\$ 370,952.64	\$ 1,235,160.26	\$ 153,654.21	\$ 1,479,318.18	\$ 319,916.95
16	\$ 365,934.93	\$ 1,217,259.39	\$ 151,427.33	\$ 1,459,308.07	\$ 315,292.83
17	\$ 360,985.08	\$ 1,199,617.95	\$ 149,232.73	\$ 1,439,568.64	\$ 310,735.56
18	\$ 356,102.19	\$ 1,182,232.18	\$ 147,069.94	\$ 1,420,096.22	\$ 306,244.15
19	\$ 351,285.35	\$ 1,165,098.38	\$ 144,938.49	\$ 1,400,887.18	\$ 301,817.67
20	\$ 346,533.66	\$ 1,148,212.89	\$ 142,837.93	\$ 1,381,937.99	\$ 297,455.16
21	\$ 341,846.25	\$ 1,131,572.13	\$ 140,767.82	\$ 1,363,245.10	\$ 293,155.71
22	\$ 337,222.25	\$ 1,115,172.53	\$ 138,727.71	\$ 1,344,805.07	\$ 288,918.41
23	\$ 332,660.79	\$ 1,099,010.61	\$ 136,717.16	\$ 1,326,614.47	\$ 284,742.35
24	\$ 328,161.03	\$ 1,083,082.92	\$ 134,735.75	\$ 1,308,669.93	\$ 280,626.66
25	\$ 323,722.13	\$ 1,067,386.07	\$ 132,783.06	\$ 1,290,968.12	\$ 276,570.45
26	\$ 319,343.28	\$ 1,051,916.70	\$ 130,858.67	\$ 1,273,505.74	\$ 272,572.87
27	\$ 315,023.66	\$ 1,036,671.53	\$ 128,962.16	\$ 1,256,279.58	\$ 268,633.07
28	\$ 310,762.47	\$ 1,021,647.31	\$ 127,093.15	\$ 1,239,286.43	\$ 264,750.22
29	\$ 306,558.92	\$ 1,006,840.83	\$ 125,251.22	\$ 1,222,523.13	\$ 260,923.49
30	\$ 302,412.23	\$ 992,248.93	\$ 123,435.98	\$ 1,205,986.59	\$ 257,152.08
31	\$ 298,321.63	\$ 977,868.51	\$ 121,647.06	\$ 1,189,673.72	\$ 253,435.18
32	\$ 294,286.36	\$ 963,696.50	\$ 119,884.06	\$ 1,173,581.52	\$ 249,772.00
33	\$ 290,305.68	\$ 949,729.89	\$ 118,146.61	\$ 1,157,706.99	\$ 246,161.77
34	\$ 286,378.84	\$ 935,965.69	\$ 116,434.34	\$ 1,142,047.18	\$ 242,603.72
35	\$ 282,505.12	\$ 922,400.97	\$ 114,746.88	\$ 1,126,599.20	\$ 239,097.10
36	\$ 278,683.79	\$ 909,032.84	\$ 113,083.88	\$ 1,111,360.18	\$ 235,641.16
37	\$ 274,914.15	\$ 895,858.45	\$ 111,444.99	\$ 1,096,327.29	\$ 232,235.18
38	\$ 271,195.51	\$ 882,874.99	\$ 109,829.84	\$ 1,081,497.74	\$ 228,878.43
39	\$ 267,527.16	\$ 870,079.70	\$ 108,238.10	\$ 1,066,868.78	\$ 225,570.19
40	\$ 263,908.44	\$ 857,469.85	\$ 106,669.44	\$ 1,052,437.71	\$ 222,309.78
41	\$ 260,338.66	\$ 845,042.75	\$ 105,123.50	\$ 1,038,201.84	\$ 219,096.49
42	\$ 256,817.17	\$ 832,795.76	\$ 103,599.97	\$ 1,024,158.53	\$ 215,929.65
43	\$ 253,343.32	\$ 820,726.25	\$ 102,098.52	\$ 1,010,305.17	\$ 212,808.58
44	\$ 249,916.45	\$ 808,831.67	\$ 100,618.84	\$ 996,639.21	\$ 209,732.62
45	\$ 246,535.94	\$ 797,109.47	\$ 99,160.59	\$ 983,158.10	\$ 206,701.12
46	\$ 243,201.15	\$ 785,557.16	\$ 97,723.48	\$ 969,859.34	\$ 203,713.44
47	\$ 239,911.48	\$ 774,172.27	\$ 96,307.20	\$ 956,740.47	\$ 200,768.94
48	\$ 236,666.30	\$ 762,952.38	\$ 94,911.44	\$ 943,799.06	\$ 197,867.01
49	\$ 233,465.01	\$ 751,895.10	\$ 93,535.91	\$ 931,032.69	\$ 195,007.02
50	\$ 230,307.03	\$ 740,998.07	\$ 92,180.32	\$ 918,439.01	\$ 192,188.37
Total =	\$ 16,394,802.41	\$ 54,164,744.45	\$ 6,738,106.01	\$ 65,380,661.46	\$ 14,036,991.39
		Maxwell Total NPV =	\$ 156,715,305.72		

Table 62: Maxwell AFB Status Quo Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.84 for Maxwell AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.9.2 Maxwell AFB Privatization

The Maxwell AFB privatization estimate included BAH, Moves, Manpower, and Project Management. The complete estimate for the privatization alternative is shown in Table 63, and totaled \$405,563,384.44.

Maxwell AFB Privatization			
BAH	Moves	Manpower	Proj Mgt
\$ 9,057,355.63	\$ 2,913,163.19	\$ 190,394.70	\$ 465,786.66
\$ 8,889,247.61	\$ 4,617,717.13	\$ 186,860.90	\$ 404,549.98
\$ 8,737,228.59	\$ 2,859,406.02	\$ 183,665.31	\$ 397,631.59
\$ 8,610,939.76	\$ 1,718,392.14	\$ 181,010.59	\$ 137,159.46
\$ 8,486,476.32	\$ 1,695,148.19	\$ 178,394.25	\$ 135,176.94
\$ 8,363,811.89	\$ 1,672,218.65	\$ 175,815.72	\$ 133,223.08
\$ 8,242,920.46	\$ 1,649,599.27	\$ 173,274.46	\$ 131,297.46
\$ 8,123,776.41	\$ 1,627,285.85	\$ 170,769.93	\$ 129,399.67
\$ 8,006,354.49	\$ 1,605,274.25	\$ 168,301.60	\$ 127,529.32
\$ 7,890,629.79	\$ 1,583,560.40	\$ 165,868.96	\$ 125,686.00
\$ 7,776,577.79	\$ 1,562,140.26	\$ 163,471.47	\$ 123,869.32
\$ 7,664,174.30	\$ 1,541,009.86	\$ 161,108.63	\$ 122,078.90
\$ 7,553,395.51	\$ 1,520,165.28	\$ 158,779.95	\$ 120,314.36
\$ 7,444,217.93	\$ 1,499,602.66	\$ 156,484.93	\$ 118,575.32
\$ 7,336,618.42	\$ 1,479,318.18	\$ 154,223.08	\$ 116,861.42
\$ 7,230,574.15	\$ 1,459,308.07	\$ 151,993.92	\$ 115,172.29
\$ 7,126,062.67	\$ 1,439,568.64	\$ 149,796.99	\$ 113,507.58
\$ 7,023,061.80	\$ 1,420,096.22	\$ 147,631.81	\$ 111,866.93
\$ 6,921,549.72	\$ 1,400,887.18	\$ 145,497.92	\$ 110,249.99
\$ 6,821,504.90	\$ 1,381,937.99	\$ 143,394.88	\$ 108,656.43
\$ 6,722,906.15	\$ 1,363,245.10	\$ 141,322.23	\$ 107,085.90
\$ 6,625,732.55	\$ 1,344,805.07	\$ 139,279.55	\$ 105,538.06
\$ 6,529,963.50	\$ 1,326,614.47	\$ 137,266.38	\$ 104,012.61
\$ 6,435,578.72	\$ 1,308,669.93	\$ 135,282.32	\$ 102,509.20
\$ 6,342,558.18	\$ 1,290,968.12	\$ 133,326.94	\$ 101,027.52
\$ 6,250,882.17	\$ 1,273,505.74	\$ 131,399.82	\$ 99,567.26
\$ 6,160,531.25	\$ 1,256,279.58	\$ 129,500.55	\$ 98,128.10
\$ 6,071,486.28	\$ 1,239,286.43	\$ 127,628.73	\$ 96,709.75
\$ 5,983,728.37	\$ 1,222,523.13	\$ 125,783.97	\$ 95,311.89
\$ 5,897,238.93	\$ 1,205,986.59	\$ 123,965.88	\$ 93,934.24
\$ 5,811,999.61	\$ 1,189,673.72	\$ 122,174.06	\$ 251,279.10
\$ 5,727,992.35	\$ 1,173,581.52	\$ 120,408.15	\$ 247,647.08
\$ 5,645,199.34	\$ 1,157,706.99	\$ 118,667.75	\$ 244,067.56
\$ 5,563,603.03	\$ 1,142,047.18	\$ 116,952.52	\$ 88,619.92
\$ 5,483,186.12	\$ 1,126,599.20	\$ 115,262.07	\$ 87,339.00
\$ 5,403,931.56	\$ 1,111,360.18	\$ 113,596.06	\$ 86,076.59
\$ 5,325,822.56	\$ 1,096,327.29	\$ 111,954.13	\$ 84,832.43
\$ 5,248,842.56	\$ 1,081,497.74	\$ 110,335.94	\$ 83,606.25
\$ 5,172,975.23	\$ 1,066,868.78	\$ 108,741.13	\$ 82,397.80
\$ 5,098,204.49	\$ 1,052,437.71	\$ 107,169.37	\$ 81,206.81
\$ 5,024,514.50	\$ 1,038,201.84	\$ 105,620.34	\$ 80,033.04
\$ 4,951,889.64	\$ 1,024,158.53	\$ 104,093.69	\$ 78,876.24
\$ 4,880,314.50	\$ 1,010,305.17	\$ 102,589.11	\$ 77,736.15
\$ 4,809,773.91	\$ 996,639.21	\$ 101,106.27	\$ 76,612.54
\$ 4,740,252.93	\$ 983,158.10	\$ 99,644.87	\$ 75,505.18
\$ 4,671,736.81	\$ 969,859.34	\$ 98,204.60	\$ 74,413.82
\$ 4,604,211.03	\$ 956,740.47	\$ 96,785.14	\$ 73,338.23
\$ 4,537,661.27	\$ 943,799.06	\$ 95,386.19	\$ 72,278.19
\$ 4,472,073.44	\$ 931,032.69	\$ 94,007.47	\$ 71,233.48
\$ 4,407,433.61	\$ 918,439.01	\$ 92,648.68	\$ 70,203.86
\$ 321,908,702.70	\$ 70,448,117.32	\$ 6,766,843.93	\$ 6,439,720.49
	Maxwell Total NPV =	\$ 405,563,384.44	

Table 63: Maxwell AFB Privatization Estimate

As previously discussed, Scoring is assumed to be zero in the cost estimate model to create the most conservative estimate possible. The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.84 for Maxwell AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.9.3 Maxwell AFB Identical FSRM

The Maxwell AFB identical FSRM estimate included BAH, FSRM Renovation #1, O&M, Utilities, Moves, Manpower, and Out Year Renovation. The complete estimate for the identical FSRM alternative is shown in Table 64, and totaled \$193,501,252.65.

Maxwell AFB Identical FSRM						
BAH	FSRM Reno 1	O&M	Utilities	Moves	Manpower	Out Year Reno
\$ 2,395,722.12	\$ 1,276,640.66	\$ 1,515,255.27	\$ 188,498.09	\$ 2,913,163.19	\$ 394,950.56	
\$ 5,437,642.10	\$ 3,293,954.91	\$ 1,493,295.05	\$ 185,766.23	\$ 4,617,717.13	\$ 387,620.13	
\$ 2,394,877.83	\$ 1,295,710.86	\$ 1,471,653.09	\$ 183,073.97	\$ 2,859,406.02	\$ 380,991.26	
\$ 430,546.99		\$ 1,450,324.78	\$ 180,420.72	\$ 1,718,392.14	\$ 375,484.37	
\$ 424,323.82		\$ 1,429,305.58	\$ 177,805.93	\$ 1,695,148.19	\$ 370,057.08	
\$ 418,190.59		\$ 1,408,591.01	\$ 175,229.03	\$ 1,672,218.65	\$ 364,708.24	
\$ 412,146.02		\$ 1,388,176.65	\$ 172,689.48	\$ 1,649,599.27	\$ 359,436.71	
\$ 406,188.82		\$ 1,368,058.15	\$ 170,186.73	\$ 1,627,285.85	\$ 354,241.37	
\$ 400,317.72		\$ 1,348,231.22	\$ 167,720.26	\$ 1,605,274.25	\$ 349,121.13	
\$ 394,531.49		\$ 1,328,691.63	\$ 165,289.53	\$ 1,583,560.40	\$ 344,074.89	
\$ 388,828.89		\$ 1,309,435.23	\$ 162,894.03	\$ 1,562,140.26	\$ 339,101.60	
\$ 383,208.72		\$ 1,290,457.91	\$ 160,533.25	\$ 1,541,009.86	\$ 334,200.19	
\$ 377,669.78		\$ 1,271,755.62	\$ 158,206.68	\$ 1,520,165.28	\$ 329,369.62	
\$ 372,210.90		\$ 1,253,324.38	\$ 155,913.83	\$ 1,499,602.66	\$ 324,608.88	
\$ 366,830.92		\$ 1,235,160.26	\$ 153,654.21	\$ 1,479,318.18	\$ 319,916.95	
\$ 361,528.71		\$ 1,217,259.39	\$ 151,427.33	\$ 1,459,308.07	\$ 315,292.83	
\$ 356,303.13		\$ 1,199,617.95	\$ 149,232.73	\$ 1,439,568.64	\$ 310,735.56	
\$ 351,153.09		\$ 1,182,232.18	\$ 147,069.94	\$ 1,420,096.22	\$ 306,244.15	
\$ 346,077.49		\$ 1,165,098.38	\$ 144,938.49	\$ 1,400,887.18	\$ 301,817.67	
\$ 341,075.25		\$ 1,148,212.89	\$ 142,837.93	\$ 1,381,937.99	\$ 297,455.16	
\$ 336,145.31		\$ 1,131,572.13	\$ 140,767.82	\$ 1,363,245.10	\$ 293,155.71	
\$ 331,286.63		\$ 1,115,172.53	\$ 138,727.71	\$ 1,344,805.07	\$ 288,918.41	
\$ 326,498.18		\$ 1,099,010.61	\$ 136,717.16	\$ 1,326,614.47	\$ 284,742.35	
\$ 321,778.94		\$ 1,083,082.92	\$ 134,735.75	\$ 1,308,669.93	\$ 280,626.66	
\$ 317,127.91		\$ 1,067,386.07	\$ 132,783.06	\$ 1,290,968.12	\$ 276,570.45	
\$ 312,544.11		\$ 1,051,916.70	\$ 130,858.67	\$ 1,273,505.74	\$ 272,572.87	
\$ 308,026.56		\$ 1,036,671.53	\$ 128,962.16	\$ 1,256,279.58	\$ 268,633.07	
\$ 303,574.31		\$ 1,021,647.31	\$ 127,093.15	\$ 1,239,286.43	\$ 264,750.22	
\$ 299,186.42		\$ 1,006,840.83	\$ 125,251.22	\$ 1,222,523.13	\$ 260,923.49	
\$ 294,861.95		\$ 992,248.93	\$ 123,435.98	\$ 1,205,986.59	\$ 257,152.08	
\$ 290,599.98		\$ 977,868.51	\$ 121,647.06	\$ 1,918,598.43	\$ 253,435.18	\$ 823,878.80
\$ 286,399.62		\$ 963,696.50	\$ 119,884.06	\$ 3,056,177.91	\$ 249,772.00	\$ 2,125,750.60
\$ 282,259.97		\$ 949,729.89	\$ 118,146.61	\$ 1,898,971.55	\$ 246,161.77	\$ 836,185.74
\$ 278,180.15		\$ 935,965.69	\$ 116,434.34	\$ 1,142,047.18	\$ 242,603.72	
\$ 274,159.31		\$ 922,400.97	\$ 114,746.88	\$ 1,126,599.20	\$ 239,097.10	
\$ 3,050,240.62		\$ 909,032.84	\$ 113,083.88	\$ 1,111,360.18	\$ 235,641.16	
\$ 4,854,227.28		\$ 895,858.45	\$ 111,444.99	\$ 1,096,327.29	\$ 232,235.18	
\$ 3,013,362.60		\$ 882,874.99	\$ 109,829.84	\$ 1,081,497.74	\$ 228,878.43	
\$ 258,648.76		\$ 870,079.70	\$ 108,238.10	\$ 1,066,868.78	\$ 225,570.19	
\$ 254,910.22		\$ 857,469.85	\$ 106,669.44	\$ 1,052,437.71	\$ 222,309.78	
\$ 251,225.73		\$ 845,042.75	\$ 105,123.50	\$ 1,038,201.84	\$ 219,096.49	
\$ 247,594.48		\$ 832,795.76	\$ 103,599.97	\$ 1,024,158.53	\$ 215,929.65	
\$ 244,015.72		\$ 820,726.25	\$ 102,098.52	\$ 1,010,305.17	\$ 212,808.58	
\$ 240,488.70		\$ 808,831.67	\$ 100,618.84	\$ 996,639.21	\$ 209,732.62	
\$ 237,012.65		\$ 797,109.47	\$ 99,160.59	\$ 983,158.10	\$ 206,701.12	
\$ 233,586.84		\$ 785,557.16	\$ 97,723.48	\$ 969,859.34	\$ 203,713.44	
\$ 230,210.55		\$ 774,172.27	\$ 96,307.20	\$ 956,740.47	\$ 200,768.94	
\$ 226,883.06		\$ 762,952.38	\$ 94,911.44	\$ 943,799.06	\$ 197,867.01	
\$ 223,603.67		\$ 751,895.10	\$ 93,535.91	\$ 931,032.69	\$ 195,007.02	
\$ 220,371.68		\$ 740,998.07	\$ 92,180.32	\$ 918,439.01	\$ 192,188.37	
\$ 35,108,386.26	\$ 5,866,306.43	\$ 54,164,744.45	\$ 6,738,106.01	\$ 73,800,902.97	\$ 14,036,991.39	\$ 3,785,815.14
		Maxwell Total NPV =	\$ 193,501,252.65			

Table 64: Maxwell AFB Identical FSRM Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.84 for Maxwell AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.10. JBSA-Randolph Estimate

The JBSA-Randolph cost data comes from all O&M costs from the years 2008-2015. Table 65 shows the O&M costs per year as well as the average over that period.

Randolph Data	
Year	O&M Cost Data
2008	\$ 162,497.29
2009	\$ 190,879.39
2010	\$ 3,053.52
2011	\$ 520,611.79
2012	\$ 213,542.82
2013	\$ 413,351.58
2014	\$ 1,824,142.40
2015	\$ 511,718.08
Mean	\$ 479,974.61

Table 65: JBSA-Randolph O&M Cost Data

Within the O&M cost data, the facility number and square footage for each facility associated with each O&M is provided and utilized to determine the costs for JBSA-Randolph. Table 66 details the JBSA-Randolph initial costs.

Base	Facility	SF	New Construction Cost	Demolition Cost	New Dorm Cost	Full Renovation Cost	PRSNL	BAH	Utilities
Randolph	393	57062	\$ 10,918,243.08	\$ 1,654,798.00	\$ 12,573,041.08	\$ 8,801,128.76	161	\$ 2,193,109.66	\$ 46,220.22
	394	50719	\$ 9,704,573.46	\$ 1,470,851.00	\$ 11,175,424.46	\$ 7,822,797.12	143	\$ 1,949,324.05	\$ 41,082.39
	861	33823	\$ 6,471,692.82	\$ 980,867.00	\$ 7,452,559.82	\$ 5,216,791.87	95	\$ 1,299,946.51	\$ 27,396.63
	862	45852	\$ 8,773,321.68	\$ 1,329,708.00	\$ 10,103,029.68	\$ 7,072,120.78	129	\$ 1,762,266.73	\$ 37,140.12

Table 66: JBSA-Randolph Initial Costs

The new construction costs were determined by multiplying the square footage of each facility by the union dormitory per square footage cost of \$191.34 shown in Table 12 (RS

Means, 2016). The Union price used to calculate the new construction costs was used based on the aforementioned assumption that the estimate should be as conservative as possible to ensure the integrity of the cost estimation model. The demolition price was calculated by multiplying the square footage by the average Air Force demolition cost of \$29.00 per square foot (UFC 3-730-01, 2011). The new construction cost was added to the demolition cost to determine the complete cost to construct a new dormitory. Since no new construction will be occurring in any phase (status quo, privatization, or identical FSRM), the full renovation cost is calculated by multiplying the new dorm cost by 70%. The 70% is the estimated cost for full renovation used by all accompanied housing privatization estimates, which drives its use in this model (AETC Group I, 2005). With the number of personnel in each existing dormitory not available, the number of personnel is determined by dividing the actual square footage of each facility by 355 square foot per person to accommodate the Dorms-4-Airmen construct (AFUHDG, 2016). BAH is determined by multiplying the number of personnel by the BAH rate for JBSA-Randolph, which is \$1,137.00 per month or \$13,644.00 per year. Finally, the initial utilities costs are calculated by multiplying the facility square footage by the \$0.81 per square foot historical average for federal dormitories (DOE, 2016).

The initial Manpower calculation for JBSA-Randolph is shown in Table 67.

Randolph									
Grade Housing Office	Base Pay	Approx Benefits (32.85%)*	STATUS QUO		IDENTICAL FSRM		PRIVATIZATION		Military Grade Equivalent
			Positions	Funding	Positions	Funding	Positions	Funding	
GS-11/7	\$ 63,337.00	\$ 20,806.20	1	\$ 84,143.20	1	\$ 84,143.20	1	\$ 84,143.20	O-3
GS-9/10	\$ 56,706.00	\$ 18,627.92	1	\$ 75,333.92	1	\$ 75,333.92	1	\$ 75,333.92	O-2
GS-9/8	\$ 53,799.00	\$ 17,672.97	1	\$ 71,471.97	1	\$ 71,471.97	1	\$ 71,471.97	O-1
GS-7/10	\$ 46,362.00	\$ 15,229.92	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/9	\$ 45,173.00	\$ 14,839.33	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/5	\$ 40,418.00	\$ 13,277.31	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/4	\$ 39,229.00	\$ 12,886.73	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/3	\$ 38,040.00	\$ 12,496.14	1	\$ 50,536.14	1	\$ 50,536.14	0	\$ -	E-7
GS-5/8	\$ 35,512.00	\$ 11,665.69	0	\$ -	0	\$ -	0	\$ -	E-6
GS-4/4	\$ 28,305.00	\$ 9,298.19	4	\$ 150,412.77	4	\$ 150,412.77	0	\$ -	E-5
			8	\$ 431,898.01	8	\$ 431,898.01		\$ 230,949.10	

Table 67: JBSA-Randolph Manpower Initial Costs

The number of personnel in the status quo and identical FSRM alternatives are based on the allotted personnel per number of individuals living in unaccompanied housing per installation. JBSA-Randolph has 528 individuals occupying unaccompanied housing units, which earns one GS-11/7, one GS-9/10, one GS-9/8, one Air Force Master Sergeant and four Air Force Staff Sergeants (AFI 32-6005, 2013). In the privatization alternative, only Flight leadership will be retained to run the Asset Management Flight, which includes one GS-11/7, one GS-9/10, and one GS-9/8. The JBSA-Randolph initial costs combined with the JBSA-Randolph manpower initial cost calculations provide the basis for each calculation in the status quo, privatization, and identical FSRM alternative.

4.2.10.1. JBSA-Randolph Status Quo

The JBSA-Randolph status quo estimate included BAH, O&M, Utilities, Moves, and Manpower. The complete estimate for the status quo alternative is shown in Table 68, and totaled \$89,321,747.81.

JBSA-Randolph Status Quo					
Year	BAH	O&M	Utilities	Moves	Manpower
1	\$ 353,619.39	\$ 412,159.42	\$ 130,386.11	\$ 1,220,432.66	\$ 364,534.77
2	\$ 347,127.82	\$ 406,186.10	\$ 128,496.46	\$ 1,198,028.59	\$ 357,768.86
3	\$ 341,258.51	\$ 400,299.34	\$ 126,634.19	\$ 1,177,772.06	\$ 351,650.50
4	\$ 336,395.17	\$ 394,497.90	\$ 124,798.91	\$ 1,160,987.39	\$ 346,567.70
5	\$ 331,844.89	\$ 388,780.54	\$ 122,990.23	\$ 1,145,283.21	\$ 341,558.38
6	\$ 327,356.17	\$ 383,146.04	\$ 121,207.77	\$ 1,129,791.46	\$ 336,621.46
7	\$ 322,928.16	\$ 377,593.20	\$ 119,451.13	\$ 1,114,509.26	\$ 331,755.89
8	\$ 318,560.05	\$ 372,120.83	\$ 117,719.95	\$ 1,099,433.77	\$ 326,960.66
9	\$ 314,251.03	\$ 366,727.78	\$ 116,013.87	\$ 1,084,562.20	\$ 322,234.74
10	\$ 310,000.29	\$ 361,412.88	\$ 114,332.51	\$ 1,069,891.79	\$ 317,577.12
11	\$ 305,807.05	\$ 356,175.02	\$ 112,675.52	\$ 1,055,419.83	\$ 312,986.83
12	\$ 301,670.53	\$ 351,013.06	\$ 111,042.54	\$ 1,041,143.62	\$ 308,462.88
13	\$ 297,589.96	\$ 345,925.91	\$ 109,433.22	\$ 1,027,060.52	\$ 304,004.33
14	\$ 293,564.59	\$ 340,912.49	\$ 107,847.24	\$ 1,013,167.91	\$ 299,610.22
15	\$ 289,593.67	\$ 335,971.73	\$ 106,284.23	\$ 999,463.22	\$ 295,279.62
16	\$ 285,676.46	\$ 331,102.58	\$ 104,743.88	\$ 985,943.91	\$ 291,011.62
17	\$ 281,812.24	\$ 326,303.99	\$ 103,225.85	\$ 972,607.47	\$ 286,805.30
18	\$ 278,000.28	\$ 321,574.95	\$ 101,729.83	\$ 959,451.43	\$ 282,659.79
19	\$ 274,239.89	\$ 316,914.44	\$ 100,255.48	\$ 946,473.34	\$ 278,574.19
20	\$ 270,530.37	\$ 312,321.48	\$ 98,802.50	\$ 933,670.81	\$ 274,547.65
21	\$ 266,871.02	\$ 307,795.08	\$ 97,370.58	\$ 921,041.44	\$ 270,579.31
22	\$ 263,261.17	\$ 303,334.28	\$ 95,959.42	\$ 908,582.91	\$ 266,668.33
23	\$ 259,700.15	\$ 298,938.13	\$ 94,568.70	\$ 896,292.90	\$ 262,813.88
24	\$ 256,187.30	\$ 294,605.69	\$ 93,198.14	\$ 884,169.13	\$ 259,015.14
25	\$ 252,721.96	\$ 290,336.05	\$ 91,847.44	\$ 872,209.36	\$ 255,271.30
26	\$ 249,303.50	\$ 286,128.28	\$ 90,516.32	\$ 860,411.35	\$ 251,581.59
27	\$ 245,931.28	\$ 281,981.49	\$ 89,204.49	\$ 848,772.94	\$ 247,945.20
28	\$ 242,604.67	\$ 277,894.80	\$ 87,911.67	\$ 837,291.95	\$ 244,361.37
29	\$ 239,323.06	\$ 273,867.34	\$ 86,637.59	\$ 825,966.27	\$ 240,829.35
30	\$ 236,085.84	\$ 269,898.25	\$ 85,381.97	\$ 814,793.78	\$ 237,348.37
31	\$ 232,892.41	\$ 265,986.68	\$ 84,144.55	\$ 803,772.41	\$ 233,917.72
32	\$ 229,742.18	\$ 262,131.80	\$ 82,925.06	\$ 792,900.13	\$ 230,536.64
33	\$ 226,634.55	\$ 258,332.79	\$ 81,723.25	\$ 782,174.91	\$ 227,204.44
34	\$ 223,568.96	\$ 254,588.84	\$ 80,538.86	\$ 771,594.76	\$ 223,920.41
35	\$ 220,544.84	\$ 250,899.14	\$ 79,371.63	\$ 761,157.73	\$ 220,683.84
36	\$ 217,561.63	\$ 247,262.92	\$ 78,221.31	\$ 750,861.88	\$ 217,494.05
37	\$ 214,618.77	\$ 243,679.40	\$ 77,087.67	\$ 740,705.29	\$ 214,350.37
38	\$ 211,715.71	\$ 240,147.82	\$ 75,970.46	\$ 730,686.09	\$ 211,252.12
39	\$ 208,851.92	\$ 236,667.41	\$ 74,869.44	\$ 720,802.41	\$ 208,198.66
40	\$ 206,026.87	\$ 233,237.45	\$ 73,784.37	\$ 711,052.43	\$ 205,189.34
41	\$ 203,240.03	\$ 229,857.20	\$ 72,715.03	\$ 701,434.33	\$ 202,223.51
42	\$ 200,490.89	\$ 226,525.94	\$ 71,661.19	\$ 691,946.33	\$ 199,300.55
43	\$ 197,778.94	\$ 223,242.95	\$ 70,622.63	\$ 682,586.67	\$ 196,419.84
44	\$ 195,103.67	\$ 220,007.55	\$ 69,599.11	\$ 673,353.61	\$ 193,580.76
45	\$ 192,464.59	\$ 216,819.03	\$ 68,590.43	\$ 664,245.45	\$ 190,782.73
46	\$ 189,861.20	\$ 213,676.73	\$ 67,596.36	\$ 655,260.49	\$ 188,025.13
47	\$ 187,293.03	\$ 210,579.96	\$ 66,616.70	\$ 646,397.06	\$ 185,307.40
48	\$ 184,759.60	\$ 207,528.08	\$ 65,651.24	\$ 637,653.52	\$ 182,628.95
49	\$ 182,260.43	\$ 204,520.43	\$ 64,699.78	\$ 629,028.26	\$ 179,989.21
50	\$ 179,795.08	\$ 201,556.36	\$ 63,762.10	\$ 620,519.66	\$ 177,387.62
Total =	\$ 12,799,021.77	\$ 14,733,167.57	\$ 4,660,818.91	\$ 44,172,759.91	\$ 12,955,979.64
		Randolph Total NPV =	\$89,321,747.81		

Table 68: JBSA-Randolph Status Quo Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.86 for JBSA-Randolph found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.10.2. JBSA-Randolph Privatization

The JBSA-Randolph privatization estimate included BAH, Moves, Manpower, and Project Management. The complete estimate for the privatization alternative is shown in Table 69, and totaled \$312,037,338.39.

JBSA-Randolph Privatization			
BAH	Moves	Manpower	Proj Mgt
\$ 7,070,856.30	\$ 3,225,313.86	\$ 194,927.91	\$ 476,876.81
\$ 6,939,618.47	\$ 2,652,890.80	\$ 191,309.97	\$ 414,182.12
\$ 6,820,940.94	\$ 1,177,772.06	\$ 188,038.30	\$ 142,484.65
\$ 6,722,350.33	\$ 1,160,987.39	\$ 185,320.37	\$ 140,425.16
\$ 6,625,184.77	\$ 1,145,283.21	\$ 182,641.73	\$ 138,395.44
\$ 6,529,423.64	\$ 1,129,791.46	\$ 180,001.81	\$ 136,395.06
\$ 6,435,046.66	\$ 1,114,509.26	\$ 177,400.04	\$ 134,423.59
\$ 6,342,033.81	\$ 1,099,433.77	\$ 174,835.88	\$ 132,480.62
\$ 6,250,365.38	\$ 1,084,562.20	\$ 172,308.79	\$ 130,565.73
\$ 6,160,021.94	\$ 1,069,891.79	\$ 169,818.22	\$ 128,678.52
\$ 6,070,984.32	\$ 1,055,419.83	\$ 167,363.65	\$ 126,818.59
\$ 5,983,233.67	\$ 1,041,143.62	\$ 164,944.55	\$ 124,985.54
\$ 5,896,751.38	\$ 1,027,060.52	\$ 162,560.43	\$ 123,178.98
\$ 5,811,519.11	\$ 1,013,167.91	\$ 160,210.76	\$ 121,398.54
\$ 5,727,518.79	\$ 999,463.22	\$ 157,895.06	\$ 119,643.83
\$ 5,644,732.63	\$ 985,943.91	\$ 155,612.83	\$ 117,914.49
\$ 5,563,143.06	\$ 972,607.47	\$ 153,363.58	\$ 116,210.14
\$ 5,482,732.80	\$ 959,451.43	\$ 151,146.85	\$ 114,530.43
\$ 5,403,484.80	\$ 946,473.34	\$ 148,962.16	\$ 112,874.99
\$ 5,325,382.25	\$ 933,670.81	\$ 146,809.04	\$ 111,243.48
\$ 5,248,408.61	\$ 921,041.44	\$ 144,687.05	\$ 109,635.56
\$ 5,172,547.56	\$ 908,582.91	\$ 142,595.73	\$ 108,050.88
\$ 5,097,783.00	\$ 896,292.90	\$ 140,534.63	\$ 106,489.10
\$ 5,024,099.11	\$ 884,169.13	\$ 138,503.33	\$ 104,949.89
\$ 4,951,480.24	\$ 872,209.36	\$ 136,501.39	\$ 103,432.93
\$ 4,879,911.02	\$ 860,411.35	\$ 134,528.38	\$ 101,937.90
\$ 4,809,376.27	\$ 848,772.94	\$ 132,583.89	\$ 100,464.48
\$ 4,739,861.03	\$ 837,291.95	\$ 130,667.51	\$ 99,012.36
\$ 4,671,350.58	\$ 825,966.27	\$ 128,778.83	\$ 97,581.22
\$ 4,603,830.38	\$ 814,793.78	\$ 126,917.45	\$ 96,170.77
\$ 4,537,286.13	\$ 803,772.41	\$ 125,082.97	\$ 257,261.93
\$ 4,471,703.71	\$ 792,900.13	\$ 123,275.01	\$ 253,543.44
\$ 4,407,069.23	\$ 782,174.91	\$ 121,493.18	\$ 92,060.57
\$ 4,343,368.98	\$ 771,594.76	\$ 119,737.10	\$ 90,729.92
\$ 4,280,589.47	\$ 761,157.73	\$ 118,006.41	\$ 89,418.50
\$ 4,218,717.37	\$ 750,861.88	\$ 116,300.73	\$ 88,126.03
\$ 4,157,739.58	\$ 740,705.29	\$ 114,619.71	\$ 86,852.25
\$ 4,097,643.17	\$ 730,686.09	\$ 112,962.98	\$ 85,596.88
\$ 4,038,415.40	\$ 720,802.41	\$ 111,330.20	\$ 84,359.65
\$ 3,980,043.72	\$ 711,052.43	\$ 109,721.03	\$ 83,140.31
\$ 3,922,515.74	\$ 701,434.33	\$ 108,135.11	\$ 81,938.59
\$ 3,865,819.28	\$ 691,946.33	\$ 106,572.11	\$ 80,754.24
\$ 3,809,942.32	\$ 682,586.67	\$ 105,031.71	\$ 79,587.01
\$ 3,754,873.01	\$ 673,353.61	\$ 103,513.57	\$ 78,436.65
\$ 3,700,599.68	\$ 664,245.45	\$ 102,017.37	\$ 77,302.92
\$ 3,647,110.81	\$ 655,260.49	\$ 100,542.80	\$ 76,185.58
\$ 3,594,395.09	\$ 646,397.06	\$ 99,089.54	\$ 75,084.38
\$ 3,542,441.32	\$ 637,653.52	\$ 97,657.29	\$ 73,999.10
\$ 3,491,238.50	\$ 629,028.26	\$ 96,245.74	\$ 72,929.51
\$ 3,440,775.76	\$ 620,519.66	\$ 94,854.60	\$ 71,875.38
\$ 251,306,261.13	\$ 47,632,503.31	\$ 6,927,959.26	\$ 6,170,614.69
	Randolph Total NPV =	\$ 312,037,338.39	

Table 69: JBSA-Randolph Privatization Estimate

As previously discussed, Scoring is assumed to be zero in the cost estimate model to create the most conservative estimate possible. The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.86 for JBSA-Randolph found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.10.3. JBSA-Randolph Identical FSRM

The JBSA-Randolph identical FSRM estimate included BAH, FSRM Renovation #1, O&M, Utilities, Moves, Manpower, and Out Year Renovation. The complete estimate for the identical FSRM alternative is shown in Table 70, and totaled \$115,287,798.05.

JBSA-Randolph Identical FSRM						
BAH	FSRM Reno 1	O&M	Utilities	Moves	Manpower	Out Year Reno
\$ 4,420,008.41	\$ 2,367,625.88	\$ 412,159.42	\$ 130,386.11	\$ 3,225,313.86	\$ 364,534.77	
\$ 3,297,943.93	\$ 1,724,855.68	\$ 406,186.10	\$ 128,496.46	\$ 2,652,890.80	\$ 357,768.86	
\$ 341,047.05		\$ 400,299.34	\$ 126,634.19	\$ 1,177,772.06	\$ 351,650.50	
\$ 336,117.52		\$ 394,497.90	\$ 124,798.91	\$ 1,160,987.39	\$ 346,567.70	
\$ 331,259.24		\$ 388,780.54	\$ 122,990.23	\$ 1,145,283.21	\$ 341,558.38	
\$ 326,471.18		\$ 383,146.04	\$ 121,207.77	\$ 1,129,791.46	\$ 336,621.46	
\$ 321,752.33		\$ 377,593.20	\$ 119,451.13	\$ 1,114,509.26	\$ 331,755.89	
\$ 317,101.69		\$ 372,120.83	\$ 117,719.95	\$ 1,099,433.77	\$ 326,960.66	
\$ 312,518.27		\$ 366,727.78	\$ 116,013.87	\$ 1,084,562.20	\$ 322,234.74	
\$ 308,001.10		\$ 361,412.88	\$ 114,332.51	\$ 1,069,891.79	\$ 317,577.12	
\$ 303,549.22		\$ 356,175.02	\$ 112,675.52	\$ 1,055,419.83	\$ 312,986.83	
\$ 299,161.68		\$ 351,013.06	\$ 111,042.54	\$ 1,041,143.62	\$ 308,462.88	
\$ 294,837.57		\$ 345,925.91	\$ 109,433.22	\$ 1,027,060.52	\$ 304,004.33	
\$ 290,575.96		\$ 340,912.49	\$ 107,847.24	\$ 1,013,167.91	\$ 299,610.22	
\$ 286,375.94		\$ 335,971.73	\$ 106,284.23	\$ 999,463.22	\$ 295,279.62	
\$ 282,236.63		\$ 331,102.58	\$ 104,743.88	\$ 985,943.91	\$ 291,011.62	
\$ 278,157.15		\$ 326,303.99	\$ 103,225.85	\$ 972,607.47	\$ 286,805.30	
\$ 274,136.64		\$ 321,574.95	\$ 101,729.83	\$ 959,451.43	\$ 282,659.79	
\$ 270,174.24		\$ 316,914.44	\$ 100,255.48	\$ 946,473.34	\$ 278,574.19	
\$ 266,269.11		\$ 312,321.48	\$ 98,802.50	\$ 933,670.81	\$ 274,547.65	
\$ 262,420.43		\$ 307,795.08	\$ 97,370.58	\$ 921,041.44	\$ 270,579.31	
\$ 258,627.38		\$ 303,334.28	\$ 95,959.42	\$ 908,582.91	\$ 266,668.33	
\$ 254,889.15		\$ 298,938.13	\$ 94,568.70	\$ 896,292.90	\$ 262,813.88	
\$ 251,204.96		\$ 294,605.69	\$ 93,198.14	\$ 884,169.13	\$ 259,015.14	
\$ 247,574.01		\$ 290,336.05	\$ 91,847.44	\$ 872,209.36	\$ 255,271.30	
\$ 243,995.55		\$ 286,128.28	\$ 90,516.32	\$ 860,411.35	\$ 251,581.59	
\$ 240,468.81		\$ 281,981.49	\$ 89,204.49	\$ 848,772.94	\$ 247,945.20	
\$ 236,993.05		\$ 277,894.80	\$ 87,911.67	\$ 837,291.95	\$ 244,361.37	
\$ 233,567.53		\$ 273,867.34	\$ 86,637.59	\$ 825,966.27	\$ 240,829.35	
\$ 230,191.52		\$ 269,898.25	\$ 85,381.97	\$ 814,793.78	\$ 237,348.37	
\$ 226,864.31		\$ 265,986.68	\$ 84,144.55	\$ 2,124,179.70	\$ 233,917.72	\$ 1,527,945.06
\$ 223,585.19		\$ 262,131.80	\$ 82,925.06	\$ 1,755,782.35	\$ 230,536.64	\$ 1,113,133.94
\$ 220,353.46		\$ 258,332.79	\$ 81,723.25	\$ 782,174.91	\$ 227,204.44	
\$ 217,168.45		\$ 254,588.84	\$ 80,538.86	\$ 771,594.76	\$ 223,920.41	
\$ 214,029.47		\$ 250,899.14	\$ 79,371.63	\$ 761,157.73	\$ 220,683.84	
\$ 3,902,174.04		\$ 247,262.92	\$ 78,221.31	\$ 750,861.88	\$ 217,494.05	
\$ 3,222,385.69		\$ 243,679.40	\$ 77,087.67	\$ 740,705.29	\$ 214,350.37	
\$ 204,882.16		\$ 240,147.82	\$ 75,970.46	\$ 730,686.09	\$ 211,252.12	
\$ 201,920.77		\$ 236,667.41	\$ 74,869.44	\$ 720,802.41	\$ 208,198.66	
\$ 199,002.19		\$ 233,237.45	\$ 73,784.37	\$ 711,052.43	\$ 205,189.34	
\$ 196,125.79		\$ 229,857.20	\$ 72,715.03	\$ 701,434.33	\$ 202,223.51	
\$ 193,290.96		\$ 226,525.94	\$ 71,661.19	\$ 691,946.33	\$ 199,300.55	
\$ 190,497.12		\$ 223,242.95	\$ 70,622.63	\$ 682,586.67	\$ 196,419.84	
\$ 187,743.65		\$ 220,007.55	\$ 69,599.11	\$ 673,353.61	\$ 193,580.76	
\$ 185,029.98		\$ 216,819.03	\$ 68,590.43	\$ 664,245.45	\$ 190,782.73	
\$ 182,355.54		\$ 213,676.73	\$ 67,596.36	\$ 655,260.49	\$ 188,025.13	
\$ 179,719.75		\$ 210,579.96	\$ 66,616.70	\$ 646,397.06	\$ 185,307.40	
\$ 177,122.07		\$ 207,528.08	\$ 65,651.24	\$ 637,653.52	\$ 182,628.95	
\$ 174,561.92		\$ 204,520.43	\$ 64,699.78	\$ 629,028.26	\$ 179,989.21	
\$ 172,038.79		\$ 201,556.36	\$ 63,762.10	\$ 620,519.66	\$ 177,387.62	
\$ 26,288,478.54	\$ 4,092,481.57	\$ 14,733,167.57	\$ 4,660,818.91	\$ 49,915,792.83	\$ 12,955,979.64	\$ 2,641,078.99
		Randolph Total NPV =	\$ 115,287,798.05			

Table 70: JBSA-Randolph Identical FSRM Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.86 for JBSA-Randolph found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.11. Sheppard AFB Estimate

The Sheppard AFB cost data comes from all O&M costs from the years 2008-2015. Table 71 shows the O&M costs per year as well as the average over that period.

Sheppard Data	
Year	O&M Cost Data
2008	\$ 7,258,135.25
2009	\$ 6,051,931.74
2010	\$ 2,013,641.33
2011	\$ 2,619,371.18
2012	\$ 1,186,326.32
2013	\$ 2,425,874.22
2014	\$ 2,060,064.82
2015	\$ 2,020,789.83
Mean	\$ 3,204,516.84

Table 71: Sheppard AFB O&M Cost Data

Within the O&M cost data, the facility number and square footage for each facility associated with each O&M is provided and utilized to determine the costs for Sheppard AFB. Table 72 details the Sheppard AFB initial costs.

Base	Facility	SF	New Construction Cost	Demolition Cost	New Dorm Cost	Full Renovation Cost	PRSNL	BAH	Utilities
Sheppard	527	36615	\$ 7,005,914.10	\$ 1,061,835.00	\$ 8,067,749.10	\$ 5,647,424.37	103	\$ 976,537.52	\$ 29,658.15
	528	24161	\$ 4,622,965.74	\$ 700,669.00	\$ 5,323,634.74	\$ 3,726,544.32	68	\$ 644,384.08	\$ 19,570.41
	596	194985	\$ 37,308,429.90	\$ 5,654,565.00	\$ 42,962,994.90	\$ 30,074,096.43	549	\$ 5,200,332.34	\$ 157,937.85
	602	160808	\$ 30,769,002.72	\$ 4,663,432.00	\$ 35,432,434.72	\$ 24,802,704.30	453	\$ 4,288,817.31	\$ 130,254.48
	622	160985	\$ 30,802,869.90	\$ 4,668,565.00	\$ 35,471,434.90	\$ 24,830,004.43	453	\$ 4,293,537.97	\$ 130,397.85
	632	58464	\$ 11,186,501.76	\$ 1,695,456.00	\$ 12,881,957.76	\$ 9,017,370.43	165	\$ 1,559,259.58	\$ 47,355.84
	633	58502	\$ 11,193,772.68	\$ 1,696,558.00	\$ 12,890,330.68	\$ 9,023,231.48	165	\$ 1,560,273.06	\$ 47,386.62
	691	36097	\$ 6,906,799.98	\$ 1,046,813.00	\$ 7,953,612.98	\$ 5,567,529.09	102	\$ 962,722.24	\$ 29,238.57
	693	35879	\$ 6,865,087.86	\$ 1,040,491.00	\$ 7,905,578.86	\$ 5,533,905.20	101	\$ 956,908.09	\$ 29,061.99
	776	194481	\$ 37,211,994.54	\$ 5,639,949.00	\$ 42,851,943.54	\$ 29,996,360.48	548	\$ 5,186,890.45	\$ 157,529.61
	791	36102	\$ 6,907,756.68	\$ 1,046,958.00	\$ 7,954,714.68	\$ 5,568,300.28	102	\$ 962,855.59	\$ 29,242.62
	792	19530	\$ 3,736,870.20	\$ 566,370.00	\$ 4,303,240.20	\$ 3,012,268.14	55	\$ 520,873.35	\$ 15,819.30
	793	27205	\$ 5,205,404.70	\$ 788,945.00	\$ 5,994,349.70	\$ 4,196,044.79	77	\$ 725,568.85	\$ 22,036.05
	862	161110	\$ 30,826,787.40	\$ 4,672,190.00	\$ 35,498,977.40	\$ 24,849,284.18	454	\$ 4,296,871.77	\$ 130,499.10
	882	161110	\$ 30,826,787.40	\$ 4,672,190.00	\$ 35,498,977.40	\$ 24,849,284.18	454	\$ 4,296,871.77	\$ 130,499.10
	1601	69799	\$ 13,355,340.66	\$ 2,024,171.00	\$ 15,379,511.66	\$ 10,765,658.16	197	\$ 1,861,568.82	\$ 56,537.19
	1602	69874	\$ 13,369,691.16	\$ 2,026,346.00	\$ 15,396,037.16	\$ 10,777,226.01	197	\$ 1,863,569.10	\$ 56,597.94
	1603	70597	\$ 13,508,029.98	\$ 2,047,313.00	\$ 15,555,342.98	\$ 10,888,740.09	199	\$ 1,882,851.82	\$ 57,183.57
	1604	70598	\$ 13,508,221.32	\$ 2,047,342.00	\$ 15,555,563.32	\$ 10,888,894.32	199	\$ 1,882,878.49	\$ 57,184.38
	1660	58739	\$ 11,239,120.26	\$ 1,703,431.00	\$ 12,942,551.26	\$ 9,059,785.88	165	\$ 1,566,593.95	\$ 47,578.59
	1661	54955	\$ 10,515,089.70	\$ 1,593,695.00	\$ 12,108,784.70	\$ 8,476,149.29	155	\$ 1,465,673.07	\$ 44,513.55
	1670	54574	\$ 10,442,189.16	\$ 1,582,646.00	\$ 12,024,835.16	\$ 8,417,384.61	154	\$ 1,455,511.64	\$ 44,204.94

Table 72: Sheppard AFB Initial Costs

The new construction costs were determined by multiplying the square footage of each facility by the union dormitory per square footage cost of \$191.34 shown in Table 12 (RS Means, 2016). The Union price used to calculate the new construction costs was used based on the aforementioned assumption that the estimate should be as conservative as possible to ensure the integrity of the cost estimation model. The demolition price was calculated by multiplying the square footage by the average Air Force demolition cost of \$29.00 per square foot (UFC 3-730-01, 2011). The new construction cost was added to the demolition cost to determine the complete cost to construct a new dormitory. Since no new construction will be occurring in any phase (status quo, privatization, or identical FSRM), the full renovation cost is calculated by multiplying the new dorm cost by 70%. The 70% is the estimated cost for full renovation used by all accompanied housing privatization estimates, which drives its use in this model (AETC Group I, 2005). With

the number of personnel in each existing dormitory not available, the number of personnel is determined by dividing the actual square footage of each facility by 355 square foot per person to accommodate the Dorms-4-Airmen construct (AFUHDG, 2016). BAH is determined by multiplying the number of personnel by the BAH rate for Sheppard AFB, which is \$789.00 per month or \$9,468.00 per year. Finally, the initial utilities costs are calculated by multiplying the facility square footage by the \$0.81 per square foot historical average for federal dormitories (DOE, 2016).

The initial Manpower calculation for Sheppard AFB is shown in Table 73.

Sheppard									
Grade Housing Office	Base Pay	Approx Benefits (32.85%)*	STATUS QUO		IDENTICAL FSRM		PRIVATIZATION		Military Grade Equivalent
			Positions	Funding	Positions	Funding	Positions	Funding	
GS-11/7	\$ 63,337.00	\$ 20,806.20	1	\$ 84,143.20	1	\$ 84,143.20	1	\$ 84,143.20	O-3
GS-9/10	\$ 56,706.00	\$ 18,627.92	1	\$ 75,333.92	1	\$ 75,333.92	1	\$ 75,333.92	O-2
GS-9/8	\$ 53,799.00	\$ 17,672.97	1	\$ 71,471.97	1	\$ 71,471.97	1	\$ 71,471.97	O-1
GS-7/10	\$ 46,362.00	\$ 15,229.92	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/9	\$ 45,173.00	\$ 14,839.33	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/5	\$ 40,418.00	\$ 13,277.31	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/4	\$ 39,229.00	\$ 12,886.73	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/3	\$ 38,040.00	\$ 12,496.14	5	\$ 252,680.70	5	\$ 252,680.70	0	\$ -	E-7
GS-5/8	\$ 35,512.00	\$ 11,665.69	10	\$ 471,776.92	10	\$ 471,776.92	0	\$ -	E-6
GS-4/4	\$ 28,305.00	\$ 9,298.19	20	\$ 752,063.85	20	\$ 752,063.85	0	\$ -	E-5
			38	\$ 1,707,470.57	38	\$ 1,707,470.57		\$ 230,949.10	

Table 73: Sheppard AFB Manpower Initial Costs

The number of personnel in the status quo and identical FSRM alternatives are based on the allotted personnel per number of individuals living in unaccompanied housing per installation. Sheppard AFB has 5,113 individuals occupying unaccompanied housing units, which earns one GS-11/7, one GS-9/10, one GS-9/8, five Air Force Master Sergeants, 10 Air Force Technical Sergeants and 20 Air Force Staff Sergeants (AFI 32-6005, 2013). In the privatization alternative, only Flight leadership will be retained to run the Asset Management Flight, which includes one GS-11/7, one GS-9/10, and one GS-9/8.

The Sheppard AFB initial costs combined with the Sheppard AFB manpower initial cost calculations provide the basis for each calculation in the status quo, privatization, and identical FSRM alternative.

4.2.11.1. Sheppard AFB Status Quo

The Sheppard AFB status quo estimate included BAH, O&M, Utilities, Moves, and Manpower. The complete estimate for the status quo alternative is shown in Table 74, and totaled \$722,036,998.77.

Sheppard AFB Status Quo					
Year	BAH	O&M	Utilities	Moves	Manpower
1	\$ 2,376,132.00	\$ 2,943,736.30	\$ 1,350,637.08	\$ 11,817,667.93	\$ 1,541,701.74
2	\$ 2,332,512.19	\$ 2,901,073.45	\$ 1,331,062.63	\$ 11,600,725.23	\$ 1,513,087.16
3	\$ 2,293,073.58	\$ 2,859,028.91	\$ 1,311,771.87	\$ 11,404,577.70	\$ 1,487,211.17
4	\$ 2,260,394.51	\$ 2,817,593.71	\$ 1,292,760.68	\$ 11,242,048.70	\$ 1,465,714.86
5	\$ 2,229,819.13	\$ 2,776,759.02	\$ 1,274,025.02	\$ 11,089,982.34	\$ 1,444,529.27
6	\$ 2,199,657.32	\$ 2,736,516.13	\$ 1,255,560.89	\$ 10,939,972.92	\$ 1,423,649.89
7	\$ 2,169,903.50	\$ 2,696,856.48	\$ 1,237,364.35	\$ 10,791,992.61	\$ 1,403,072.30
8	\$ 2,140,552.15	\$ 2,657,771.60	\$ 1,219,431.54	\$ 10,646,013.96	\$ 1,382,792.14
9	\$ 2,111,597.82	\$ 2,619,253.17	\$ 1,201,758.62	\$ 10,502,009.91	\$ 1,362,805.12
10	\$ 2,083,035.15	\$ 2,581,292.98	\$ 1,184,341.83	\$ 10,359,953.74	\$ 1,343,106.99
11	\$ 2,054,858.82	\$ 2,543,882.94	\$ 1,167,177.45	\$ 10,219,819.10	\$ 1,323,693.58
12	\$ 2,027,063.63	\$ 2,507,015.07	\$ 1,150,261.84	\$ 10,081,580.00	\$ 1,304,560.77
13	\$ 1,999,644.41	\$ 2,470,681.52	\$ 1,133,591.37	\$ 9,945,210.80	\$ 1,285,704.51
14	\$ 1,972,596.08	\$ 2,434,874.54	\$ 1,117,162.51	\$ 9,810,686.21	\$ 1,267,120.80
15	\$ 1,945,913.63	\$ 2,399,586.50	\$ 1,100,971.75	\$ 9,677,981.27	\$ 1,248,805.70
16	\$ 1,919,592.09	\$ 2,364,809.89	\$ 1,085,015.64	\$ 9,547,071.38	\$ 1,230,755.33
17	\$ 1,893,626.59	\$ 2,330,537.28	\$ 1,069,290.78	\$ 9,417,932.25	\$ 1,212,965.86
18	\$ 1,868,012.32	\$ 2,296,761.38	\$ 1,053,793.81	\$ 9,290,539.93	\$ 1,195,433.53
19	\$ 1,842,744.52	\$ 2,263,474.98	\$ 1,038,521.43	\$ 9,164,870.79	\$ 1,178,154.60
20	\$ 1,817,818.51	\$ 2,230,670.99	\$ 1,023,470.40	\$ 9,040,901.53	\$ 1,161,125.43
21	\$ 1,793,229.66	\$ 2,198,342.43	\$ 1,008,637.50	\$ 8,918,609.14	\$ 1,144,342.40
22	\$ 1,768,973.41	\$ 2,166,482.39	\$ 994,019.56	\$ 8,797,970.95	\$ 1,127,801.95
23	\$ 1,745,045.27	\$ 2,135,084.10	\$ 979,613.48	\$ 8,678,964.58	\$ 1,111,500.58
24	\$ 1,721,440.79	\$ 2,104,140.85	\$ 965,416.18	\$ 8,561,567.95	\$ 1,095,434.84
25	\$ 1,698,155.60	\$ 2,073,646.06	\$ 951,424.64	\$ 8,445,759.31	\$ 1,079,601.30
26	\$ 1,675,185.38	\$ 2,043,593.21	\$ 937,635.88	\$ 8,331,517.15	\$ 1,063,996.63
27	\$ 1,652,525.87	\$ 2,013,975.92	\$ 924,046.96	\$ 8,218,820.30	\$ 1,048,617.51
28	\$ 1,630,172.86	\$ 1,984,787.86	\$ 910,654.97	\$ 8,107,647.85	\$ 1,033,460.68
29	\$ 1,608,122.21	\$ 1,956,022.82	\$ 897,457.07	\$ 7,997,979.19	\$ 1,018,522.93
30	\$ 1,586,369.84	\$ 1,927,674.67	\$ 884,450.45	\$ 7,889,793.96	\$ 1,003,801.09
31	\$ 1,564,911.69	\$ 1,899,737.35	\$ 871,632.33	\$ 7,783,072.11	\$ 989,292.05
32	\$ 1,543,743.81	\$ 1,872,204.93	\$ 858,999.97	\$ 7,677,793.84	\$ 974,992.71
33	\$ 1,522,862.25	\$ 1,845,071.52	\$ 846,550.70	\$ 7,573,939.62	\$ 960,900.07
34	\$ 1,502,263.14	\$ 1,818,331.36	\$ 834,281.85	\$ 7,471,490.20	\$ 947,011.11
35	\$ 1,481,942.68	\$ 1,791,978.73	\$ 822,190.81	\$ 7,370,426.56	\$ 933,322.91
36	\$ 1,461,897.08	\$ 1,766,008.02	\$ 810,275.00	\$ 7,270,729.97	\$ 919,832.57
37	\$ 1,442,122.62	\$ 1,740,413.70	\$ 798,531.88	\$ 7,172,381.93	\$ 906,537.21
38	\$ 1,422,615.65	\$ 1,715,190.31	\$ 786,958.96	\$ 7,075,364.21	\$ 893,434.02
39	\$ 1,403,372.54	\$ 1,690,332.48	\$ 775,553.75	\$ 6,979,658.80	\$ 880,520.23
40	\$ 1,384,389.72	\$ 1,665,834.91	\$ 764,313.84	\$ 6,885,247.95	\$ 867,793.10
41	\$ 1,365,663.68	\$ 1,641,692.38	\$ 753,236.83	\$ 6,792,114.16	\$ 855,249.93
42	\$ 1,347,190.93	\$ 1,617,899.73	\$ 742,320.36	\$ 6,700,240.16	\$ 842,888.05
43	\$ 1,328,968.06	\$ 1,594,451.91	\$ 731,562.09	\$ 6,609,608.89	\$ 830,704.86
44	\$ 1,310,991.68	\$ 1,571,343.91	\$ 720,959.74	\$ 6,520,203.55	\$ 818,697.76
45	\$ 1,293,258.46	\$ 1,548,570.81	\$ 710,511.05	\$ 6,432,007.56	\$ 806,864.22
46	\$ 1,275,765.11	\$ 1,526,127.76	\$ 700,213.79	\$ 6,345,004.56	\$ 795,201.72
47	\$ 1,258,508.38	\$ 1,504,009.96	\$ 690,065.76	\$ 6,259,178.41	\$ 783,707.79
48	\$ 1,241,485.08	\$ 1,482,212.72	\$ 680,064.81	\$ 6,174,513.20	\$ 772,379.99
49	\$ 1,224,692.05	\$ 1,460,731.37	\$ 670,208.80	\$ 6,090,993.21	\$ 761,215.93
50	\$ 1,208,126.16	\$ 1,439,561.35	\$ 660,495.63	\$ 6,008,602.96	\$ 750,213.23
Total =	\$ 86,002,539.60	\$ 105,227,632.38	\$ 48,280,256.12	\$ 427,732,740.53	\$ 54,793,830.13
		Sheppard Total NPV =	\$ 722,036,998.77		

Table 74: Sheppard AFB Status Quo Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.92 for Sheppard AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.11.2. Sheppard AFB Privatization

The Sheppard AFB privatization estimate included BAH, Moves, Manpower, and Project Management. The complete estimate for the privatization alternative is shown in Table 75, and totaled \$2,165,708,926.25.

Sheppard AFB Privatization			
BAH	Moves	Manpower	Proj Mgt
\$ 47,512,349.75	\$ 12,948,188.70	\$ 208,527.53	\$ 510,147.29
\$ 46,630,502.18	\$ 18,097,490.72	\$ 204,657.18	\$ 443,078.55
\$ 45,833,053.01	\$ 15,343,953.98	\$ 201,157.25	\$ 435,501.26
\$ 45,170,577.19	\$ 12,916,014.80	\$ 198,249.70	\$ 429,206.48
\$ 44,517,676.86	\$ 15,111,153.64	\$ 195,384.18	\$ 423,002.68
\$ 43,874,213.63	\$ 11,897,950.99	\$ 192,560.07	\$ 416,888.56
\$ 43,240,051.09	\$ 13,990,896.59	\$ 189,776.79	\$ 410,862.81
\$ 42,615,054.79	\$ 14,515,404.30	\$ 187,033.73	\$ 404,924.15
\$ 41,999,092.26	\$ 12,824,071.57	\$ 184,330.33	\$ 399,071.34
\$ 41,392,032.92	\$ 12,469,044.40	\$ 181,666.00	\$ 393,303.12
\$ 40,793,748.07	\$ 11,981,742.33	\$ 179,040.18	\$ 387,618.27
\$ 40,204,110.90	\$ 10,081,580.00	\$ 176,452.31	\$ 133,705.46
\$ 39,622,996.41	\$ 9,945,210.80	\$ 173,901.85	\$ 131,772.87
\$ 39,050,281.41	\$ 9,810,686.21	\$ 171,388.26	\$ 129,868.21
\$ 38,485,844.49	\$ 9,677,981.27	\$ 168,910.99	\$ 127,991.08
\$ 37,929,566.01	\$ 9,547,071.38	\$ 166,469.54	\$ 126,141.08
\$ 37,381,328.03	\$ 9,417,932.25	\$ 164,063.37	\$ 124,317.82
\$ 36,841,014.34	\$ 9,290,539.93	\$ 161,691.98	\$ 122,520.92
\$ 36,308,510.40	\$ 9,164,870.79	\$ 159,354.86	\$ 120,749.99
\$ 35,783,703.33	\$ 9,040,901.53	\$ 157,051.53	\$ 119,004.66
\$ 35,266,481.88	\$ 8,918,609.14	\$ 154,781.49	\$ 117,284.55
\$ 34,756,736.41	\$ 8,797,970.95	\$ 152,544.27	\$ 115,589.31
\$ 34,254,358.84	\$ 8,678,964.58	\$ 150,339.37	\$ 113,918.57
\$ 33,759,242.70	\$ 8,561,567.95	\$ 148,166.35	\$ 112,271.98
\$ 33,271,283.02	\$ 8,445,759.31	\$ 146,024.74	\$ 110,649.19
\$ 32,790,376.36	\$ 8,331,517.15	\$ 143,914.08	\$ 109,049.85
\$ 32,316,420.77	\$ 8,218,820.30	\$ 141,833.93	\$ 107,473.63
\$ 31,849,315.79	\$ 8,107,647.85	\$ 139,783.85	\$ 105,920.20
\$ 31,388,962.40	\$ 7,997,979.19	\$ 137,763.40	\$ 104,389.22
\$ 30,935,263.00	\$ 7,889,793.96	\$ 135,772.15	\$ 102,880.36
\$ 30,488,121.42	\$ 7,783,072.11	\$ 133,809.69	\$ 275,210.44
\$ 30,047,442.87	\$ 7,677,793.84	\$ 131,875.59	\$ 271,232.52
\$ 29,613,133.94	\$ 7,573,939.62	\$ 129,969.45	\$ 267,312.09
\$ 29,185,102.55	\$ 7,471,490.20	\$ 128,090.85	\$ 263,448.34
\$ 28,763,257.98	\$ 7,370,426.56	\$ 126,239.41	\$ 259,640.43
\$ 28,347,510.79	\$ 7,270,729.97	\$ 124,414.74	\$ 255,887.56
\$ 27,937,772.86	\$ 7,172,381.93	\$ 122,616.43	\$ 252,188.93
\$ 27,533,957.32	\$ 7,075,364.21	\$ 120,844.12	\$ 248,543.76
\$ 27,135,978.58	\$ 6,979,658.80	\$ 119,097.43	\$ 244,951.29
\$ 26,743,752.26	\$ 6,885,247.95	\$ 117,375.98	\$ 241,410.73
\$ 26,357,195.22	\$ 6,792,114.16	\$ 115,679.42	\$ 237,921.36
\$ 25,976,225.52	\$ 6,700,240.16	\$ 114,007.37	\$ 86,388.26
\$ 25,600,762.39	\$ 6,609,608.89	\$ 112,359.50	\$ 85,139.59
\$ 25,230,726.25	\$ 6,520,203.55	\$ 110,735.44	\$ 83,908.98
\$ 24,866,038.66	\$ 6,432,007.56	\$ 109,134.86	\$ 82,696.15
\$ 24,506,622.29	\$ 6,345,004.56	\$ 107,557.41	\$ 81,500.85
\$ 24,152,400.97	\$ 6,259,178.41	\$ 106,002.77	\$ 80,322.83
\$ 23,803,299.60	\$ 6,174,513.20	\$ 104,470.59	\$ 79,161.83
\$ 23,459,244.17	\$ 6,090,993.21	\$ 102,960.56	\$ 78,017.62
\$ 23,120,161.77	\$ 6,008,602.96	\$ 101,472.36	\$ 76,889.94
\$ 1,688,642,855.66	\$ 459,213,888.42	\$ 7,411,305.26	\$ 10,440,876.92
	Sheppard Total NPV =	\$ 2,165,708,926.25	

Table 75: Sheppard AFB Privatization Estimate

As previously discussed, Scoring is assumed to be zero in the cost estimate model to create the most conservative estimate possible. The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.92 for Sheppard AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.11.3. Sheppard AFB Identical FSRM

The Sheppard AFB identical FSRM estimate included BAH, FSRM Renovation #1, O&M, Utilities, Moves, Manpower, and Out Year Renovation. The complete estimate for the identical FSRM alternative is shown in Table 76, and totaled \$1,038,128,190.47.

Sheppard AFB Identical FSRM						
BAH	FSRM Reno 1	O&M	Utilities	Moves	Manpower	Out Year Reno
\$ 3,967,297.56	\$ 1,428,210.95	\$ 2,943,736.30	\$ 1,350,637.08	\$ 12,948,188.70	\$ 1,541,701.74	
\$ 11,476,465.75	\$ 8,239,815.12	\$ 2,901,073.45	\$ 1,331,062.63	\$ 18,097,490.72	\$ 1,513,087.16	
\$ 7,832,741.17	\$ 5,008,567.10	\$ 2,859,028.91	\$ 1,311,771.87	\$ 15,343,953.98	\$ 1,487,211.17	
\$ 4,612,628.71	\$ 2,127,777.72	\$ 2,817,593.71	\$ 1,292,760.68	\$ 12,916,014.80	\$ 1,465,714.86	
\$ 7,875,543.13	\$ 5,106,303.26	\$ 2,776,759.02	\$ 1,274,025.02	\$ 15,111,153.64	\$ 1,444,529.27	
\$ 3,538,383.77	\$ 1,215,301.49	\$ 2,736,516.13	\$ 1,255,560.89	\$ 11,897,950.99	\$ 1,423,649.89	
\$ 6,647,946.14	\$ 4,054,189.95	\$ 2,696,856.48	\$ 1,237,364.35	\$ 13,990,896.59	\$ 1,403,072.30	
\$ 7,551,842.60	\$ 4,899,140.12	\$ 2,657,771.60	\$ 1,219,431.54	\$ 14,515,404.30	\$ 1,382,792.14	
\$ 5,350,148.53	\$ 2,937,145.74	\$ 2,619,253.17	\$ 1,201,758.62	\$ 12,824,071.57	\$ 1,362,805.12	
\$ 5,018,923.95	\$ 2,665,148.59	\$ 2,581,292.98	\$ 1,184,341.83	\$ 12,469,044.40	\$ 1,343,106.99	
\$ 4,501,219.07	\$ 3,267,918.29	\$ 2,543,882.94	\$ 1,167,177.45	\$ 11,981,742.33	\$ 1,323,693.58	
\$ 2,010,205.55		\$ 2,507,015.07	\$ 1,150,261.84	\$ 10,081,580.00	\$ 1,304,560.77	
\$ 1,981,149.82		\$ 2,470,681.52	\$ 1,133,591.37	\$ 9,945,210.80	\$ 1,285,704.51	
\$ 1,952,514.07		\$ 2,434,874.54	\$ 1,117,162.51	\$ 9,810,686.21	\$ 1,267,120.80	
\$ 1,924,292.22		\$ 2,399,586.50	\$ 1,100,971.75	\$ 9,677,981.27	\$ 1,248,805.70	
\$ 1,896,478.30		\$ 2,364,809.89	\$ 1,085,015.64	\$ 9,547,071.38	\$ 1,230,755.33	
\$ 1,869,066.40		\$ 2,330,537.28	\$ 1,069,290.78	\$ 9,417,932.25	\$ 1,212,965.86	
\$ 1,842,050.72		\$ 2,296,761.38	\$ 1,053,793.81	\$ 9,290,539.93	\$ 1,195,433.53	
\$ 1,815,425.52		\$ 2,263,474.98	\$ 1,038,521.43	\$ 9,164,870.79	\$ 1,178,154.60	
\$ 1,789,185.17		\$ 2,230,670.99	\$ 1,023,470.40	\$ 9,040,901.53	\$ 1,161,125.43	
\$ 1,763,324.09		\$ 2,198,342.43	\$ 1,008,637.50	\$ 8,918,609.14	\$ 1,144,342.40	
\$ 1,737,836.82		\$ 2,166,482.39	\$ 994,019.56	\$ 8,797,970.95	\$ 1,127,801.95	
\$ 1,712,717.94		\$ 2,135,084.10	\$ 979,613.48	\$ 8,678,964.58	\$ 1,111,500.58	
\$ 1,687,962.14		\$ 2,104,140.85	\$ 965,416.18	\$ 8,561,567.95	\$ 1,095,434.84	
\$ 1,663,564.15		\$ 2,073,646.06	\$ 951,424.64	\$ 8,445,759.31	\$ 1,079,601.30	
\$ 1,639,518.82		\$ 2,043,593.21	\$ 937,635.88	\$ 8,331,517.15	\$ 1,063,996.63	
\$ 1,615,821.04		\$ 2,013,975.92	\$ 924,046.96	\$ 8,218,820.30	\$ 1,048,617.51	
\$ 1,592,465.79		\$ 1,984,787.86	\$ 910,654.97	\$ 8,107,647.85	\$ 1,033,460.68	
\$ 1,569,448.12		\$ 1,956,022.82	\$ 897,457.07	\$ 7,997,979.19	\$ 1,018,522.93	
\$ 1,546,763.15		\$ 1,927,674.67	\$ 884,450.45	\$ 7,889,793.96	\$ 1,003,801.09	
\$ 1,524,406.07		\$ 1,899,737.35	\$ 871,632.33	\$ 8,527,628.88	\$ 989,292.05	\$ 921,694.55
\$ 1,502,372.14		\$ 1,872,204.93	\$ 858,999.97	\$ 11,977,596.22	\$ 974,992.71	\$ 5,317,556.67
\$ 1,480,656.70		\$ 1,845,071.52	\$ 846,550.70	\$ 10,190,134.53	\$ 960,900.07	\$ 3,232,273.90
\$ 1,459,255.13		\$ 1,818,331.36	\$ 834,281.85	\$ 8,584,011.74	\$ 947,011.11	\$ 1,373,159.28
\$ 1,438,162.90		\$ 1,791,978.73	\$ 822,190.81	\$ 10,042,905.82	\$ 933,322.91	\$ 3,295,347.84
\$ 10,870,767.60		\$ 1,766,008.02	\$ 810,275.00	\$ 7,907,404.30	\$ 919,832.57	\$ 784,293.63
\$ 15,254,326.88		\$ 1,740,413.70	\$ 798,531.88	\$ 9,298,380.53	\$ 906,537.21	\$ 2,616,367.54
\$ 12,965,663.85		\$ 1,715,190.31	\$ 786,958.96	\$ 9,646,969.50	\$ 893,434.02	\$ 3,161,655.30
\$ 10,911,805.19		\$ 1,690,332.48	\$ 775,553.75	\$ 8,522,906.07	\$ 880,520.23	\$ 1,895,484.14
\$ 12,754,315.38		\$ 1,665,834.91	\$ 764,313.84	\$ 8,286,954.23	\$ 867,793.10	\$ 1,719,951.05
\$ 10,032,823.37		\$ 1,641,692.38	\$ 753,236.83	\$ 7,963,092.20	\$ 855,249.93	\$ 1,435,430.76
\$ 11,786,585.14		\$ 1,617,899.73	\$ 742,320.36	\$ 6,700,240.16	\$ 842,888.05	
\$ 12,216,957.09		\$ 1,594,451.91	\$ 731,562.09	\$ 6,609,608.89	\$ 830,704.86	
\$ 10,783,290.51		\$ 1,571,343.91	\$ 720,959.74	\$ 6,520,203.55	\$ 818,697.76	
\$ 10,474,902.86		\$ 1,548,570.81	\$ 710,511.05	\$ 6,432,007.56	\$ 806,864.22	
\$ 10,056,069.56		\$ 1,526,127.76	\$ 700,213.79	\$ 6,345,004.56	\$ 795,201.72	
\$ 1,207,620.05		\$ 1,504,009.96	\$ 690,065.76	\$ 6,259,178.41	\$ 783,707.79	
\$ 1,190,164.98		\$ 1,482,212.72	\$ 680,064.81	\$ 6,174,513.20	\$ 772,379.99	
\$ 1,172,962.21		\$ 1,460,731.37	\$ 670,208.80	\$ 6,090,993.21	\$ 761,215.93	
\$ 1,156,008.09		\$ 1,439,561.35	\$ 660,495.63	\$ 6,008,602.96	\$ 750,213.23	
\$ 242,222,045.90	\$ 40,949,518.32	\$ 105,227,632.38	\$ 48,280,256.12	\$ 480,109,653.08	\$ 54,793,830.13	\$ 25,753,214.65
		Sheppard Total NPV =	\$ 997,336,150.58			

Table 76: Sheppard AFB Identical FSRM Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.92 for Sheppard AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.12. Vance AFB Estimate

The Vance AFB cost data comes from all O&M costs from the years 2008-2015. Table 77 shows the O&M costs per year as well as the average over that period.

Vance Data	
Year	O&M Cost Data
2008	\$ 26,196.42
2009	\$ 37,579.72
2010	\$ 77,478.26
2011	\$ 80,206.45
2012	\$ 71,774.91
2013	\$ 87,651.42
2014	\$ 86,177.41
2015	\$ 84,558.20
Mean	\$ 68,952.85

Table 77: Vance AFB O&M Cost Data

Within the O&M cost data, the facility number and square footage for each facility associated with each O&M is provided and utilized to determine the costs for Vance AFB. Table 78 details the Vance AFB initial costs.

Base	Facility	SF	New Construction Cost	Demolition Cost	New Dorm Cost	Full Renovation Cost	PRSNL	BAH	Utilities
Vance	421	25666	\$ 4,910,932.44	\$ 744,314.00	\$ 5,655,246.44	\$ 3,958,672.51	72	\$ 640,276.33	\$ 20,789.46
	423	25726	\$ 4,922,412.84	\$ 746,054.00	\$ 5,668,466.84	\$ 3,967,926.79	72	\$ 641,773.12	\$ 20,838.06

Table 78: Vance AFB Initial Costs

The new construction costs were determined by multiplying the square footage of each facility by the union dormitory per square footage cost of \$191.34 shown in Table 12 (RS Means, 2016). The Union price used to calculate the new construction costs was used

based on the aforementioned assumption that the estimate should be as conservative as possible to ensure the integrity of the cost estimation model. The demolition price was calculated by multiplying the square footage by the average Air Force demolition cost of \$29.00 per square foot (UFC 3-730-01, 2011). The new construction cost was added to the demolition cost to determine the complete cost to construct a new dormitory. Since no new construction will be occurring in any phase (status quo, privatization, or identical FSRM), the full renovation cost is calculated by multiplying the new dorm cost by 70%. The 70% is the estimated cost for full renovation used by all accompanied housing privatization estimates, which drives its use in this model (AETC Group I, 2005). With the number of personnel in each existing dormitory not available, the number of personnel is determined by dividing the actual square footage of each facility by 355 square foot per person to accommodate the Dorms-4-Airmen construct (AFUHDG, 2016). BAH is determined by multiplying the number of personnel by the BAH rate for Vance AFB, which is \$738.00 per month or \$8,856.00 per year. Finally, the initial utilities costs are calculated by multiplying the facility square footage by the \$0.81 per square foot historical average for federal dormitories (DOE, 2016).

The initial Manpower calculation for Vance AFB is shown in Table 79.

Vance									
Grade Housing Office	Base Pay	Approx Benefits (32.85%)*	STATUS QUO		IDENTICAL FSRM		PRIVATIZATION		Military Grade Equivalent
			Positions	Funding	Positions	Funding	Positions	Funding	
GS-11/7	\$ 63,337.00	\$ 20,806.20	1	\$ 84,143.20	1	\$ 84,143.20	1	\$ 84,143.20	O-3
GS-9/10	\$ 56,706.00	\$ 18,627.92	1	\$ 75,333.92	1	\$ 75,333.92	1	\$ 75,333.92	O-2
GS-9/8	\$ 53,799.00	\$ 17,672.97	1	\$ 71,471.97	1	\$ 71,471.97	1	\$ 71,471.97	O-1
GS-7/10	\$ 46,362.00	\$ 15,229.92	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/9	\$ 45,173.00	\$ 14,839.33	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/5	\$ 40,418.00	\$ 13,277.31	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/4	\$ 39,229.00	\$ 12,886.73	0	\$ -	0	\$ -	0	\$ -	E-7
GS-7/3	\$ 38,040.00	\$ 12,496.14	1	\$ 50,536.14	1	\$ 50,536.14	0	\$ -	E-7
GS-5/8	\$ 35,512.00	\$ 11,665.69	0	\$ -	0	\$ -	0	\$ -	E-6
GS-4/4	\$ 28,305.00	\$ 9,298.19	0	\$ -	0	\$ -	0	\$ -	E-5
			4	\$ 281,485.24	4	\$ 281,485.24		\$ 230,949.10	

Table 79: Vance AFB Manpower Initial Costs

The number of personnel in the status quo and identical FSRM alternatives are based on the allotted personnel per number of individuals living in unaccompanied housing per installation. Vance AFB has 145 individuals occupying unaccompanied housing units, which earns one GS-11/7, one GS-9/10, one GS-9/8, and one Air Force Master Sergeant (AFI 32-6005, 2013). In the privatization alternative, only Flight leadership will be retained to run the Asset Management Flight, which includes one GS-11/7, one GS-9/10, and one GS-9/8. The Vance AFB initial costs combined with the Vance AFB manpower initial cost calculations provide the basis for each calculation in the status quo, privatization, and identical FSRM alternative.

4.2.12.1. Vance AFB Status Quo

The Vance AFB status quo estimate included BAH, O&M, Utilities, Moves, and Manpower. The complete estimate for the status quo alternative is shown in Table 80, and totaled \$27,051,939.55.

Vance AFB Status Quo					
Year	BAH	O&M	Utilities	Moves	Manpower
1	\$ 62,925.71	\$ 63,341.53	\$ 38,239.91	\$ 334,587.72	\$ 254,157.40
2	\$ 61,770.55	\$ 62,423.54	\$ 37,685.71	\$ 328,445.53	\$ 249,440.14
3	\$ 60,726.12	\$ 61,518.85	\$ 37,139.54	\$ 322,892.10	\$ 245,174.35
4	\$ 59,860.70	\$ 60,627.27	\$ 36,601.29	\$ 318,290.50	\$ 241,630.58
5	\$ 59,050.99	\$ 59,748.62	\$ 36,070.83	\$ 313,985.12	\$ 238,138.02
6	\$ 58,252.24	\$ 58,882.69	\$ 35,548.07	\$ 309,737.98	\$ 234,695.95
7	\$ 57,464.28	\$ 58,029.32	\$ 35,032.88	\$ 305,548.29	\$ 231,303.63
8	\$ 56,686.99	\$ 57,188.32	\$ 34,525.16	\$ 301,415.27	\$ 227,960.34
9	\$ 55,920.21	\$ 56,359.50	\$ 34,024.79	\$ 297,338.15	\$ 224,665.38
10	\$ 55,163.80	\$ 55,542.70	\$ 33,531.68	\$ 293,316.19	\$ 221,418.04
11	\$ 54,417.62	\$ 54,737.73	\$ 33,045.71	\$ 289,348.62	\$ 218,217.64
12	\$ 53,681.54	\$ 53,944.43	\$ 32,566.79	\$ 285,434.73	\$ 215,063.50
13	\$ 52,955.41	\$ 53,162.63	\$ 32,094.81	\$ 281,573.78	\$ 211,954.95
14	\$ 52,239.11	\$ 52,392.15	\$ 31,629.66	\$ 277,765.05	\$ 208,891.33
15	\$ 51,532.49	\$ 51,632.85	\$ 31,171.26	\$ 274,007.84	\$ 205,871.99
16	\$ 50,835.43	\$ 50,884.54	\$ 30,719.50	\$ 270,301.46	\$ 202,896.30
17	\$ 50,147.80	\$ 50,147.09	\$ 30,274.29	\$ 266,645.20	\$ 199,963.61
18	\$ 49,469.48	\$ 49,420.32	\$ 29,835.54	\$ 263,038.41	\$ 197,073.32
19	\$ 48,800.32	\$ 48,704.08	\$ 29,403.14	\$ 259,480.40	\$ 194,224.80
20	\$ 48,140.22	\$ 47,998.22	\$ 28,977.01	\$ 255,970.52	\$ 191,417.45
21	\$ 47,489.05	\$ 47,302.60	\$ 28,557.05	\$ 252,508.12	\$ 188,650.68
22	\$ 46,846.69	\$ 46,617.05	\$ 28,143.18	\$ 249,092.55	\$ 185,923.91
23	\$ 46,213.01	\$ 45,941.44	\$ 27,735.31	\$ 245,723.18	\$ 183,236.54
24	\$ 45,587.91	\$ 45,275.63	\$ 27,333.35	\$ 242,399.39	\$ 180,588.02
25	\$ 44,971.26	\$ 44,619.46	\$ 26,937.21	\$ 239,120.56	\$ 177,977.78
26	\$ 44,362.95	\$ 43,972.80	\$ 26,546.82	\$ 235,886.08	\$ 175,405.27
27	\$ 43,762.87	\$ 43,335.51	\$ 26,162.08	\$ 232,695.35	\$ 172,869.95
28	\$ 43,170.91	\$ 42,707.46	\$ 25,782.92	\$ 229,547.78	\$ 170,371.27
29	\$ 42,586.96	\$ 42,088.51	\$ 25,409.25	\$ 226,442.78	\$ 167,908.70
30	\$ 42,010.90	\$ 41,478.53	\$ 25,041.00	\$ 223,379.79	\$ 165,481.73
31	\$ 41,442.64	\$ 40,877.40	\$ 24,678.09	\$ 220,358.23	\$ 163,089.84
32	\$ 40,882.06	\$ 40,284.97	\$ 24,320.44	\$ 217,377.54	\$ 160,732.52
33	\$ 40,329.07	\$ 39,701.13	\$ 23,967.97	\$ 214,437.16	\$ 158,409.28
34	\$ 39,783.55	\$ 39,125.75	\$ 23,620.60	\$ 211,536.56	\$ 156,119.62
35	\$ 39,245.42	\$ 38,558.71	\$ 23,278.28	\$ 208,675.20	\$ 153,863.05
36	\$ 38,714.56	\$ 37,999.89	\$ 22,940.91	\$ 205,852.54	\$ 151,639.09
37	\$ 38,190.89	\$ 37,449.17	\$ 22,608.43	\$ 203,068.06	\$ 149,447.29
38	\$ 37,674.30	\$ 36,906.42	\$ 22,280.78	\$ 200,321.25	\$ 147,287.16
39	\$ 37,164.69	\$ 36,371.55	\$ 21,957.87	\$ 197,611.59	\$ 145,158.25
40	\$ 36,661.98	\$ 35,844.42	\$ 21,639.64	\$ 194,938.58	\$ 143,060.12
41	\$ 36,166.07	\$ 35,324.94	\$ 21,326.02	\$ 192,301.73	\$ 140,992.32
42	\$ 35,676.87	\$ 34,812.98	\$ 21,016.94	\$ 189,700.55	\$ 138,954.40
43	\$ 35,194.28	\$ 34,308.45	\$ 20,712.35	\$ 187,134.55	\$ 136,945.94
44	\$ 34,718.22	\$ 33,811.22	\$ 20,412.17	\$ 184,603.26	\$ 134,966.50
45	\$ 34,248.61	\$ 33,321.21	\$ 20,116.34	\$ 182,106.21	\$ 133,015.68
46	\$ 33,785.34	\$ 32,838.29	\$ 19,824.80	\$ 179,642.94	\$ 131,093.06
47	\$ 33,328.34	\$ 32,362.37	\$ 19,537.49	\$ 177,212.99	\$ 129,198.23
48	\$ 32,877.52	\$ 31,893.35	\$ 19,254.33	\$ 174,815.90	\$ 127,330.78
49	\$ 32,432.80	\$ 31,431.13	\$ 18,975.29	\$ 172,451.24	\$ 125,490.33
50	\$ 31,994.10	\$ 30,975.61	\$ 18,700.28	\$ 170,118.57	\$ 123,676.48
Total =	\$ 2,277,554.87	\$ 2,264,224.34	\$ 1,366,934.73	\$ 12,110,183.07	\$ 9,033,042.54
		Vance Total NPV =	\$ 27,051,939.55		

Table 80: Vance AFB Status Quo Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.92 for Vance AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.12.2. Vance AFB Privatization

The Vance AFB privatization estimate included BAH, Moves, Manpower, and Project Management. The complete estimate for the privatization alternative is shown in Table 81, and totaled \$71,004,021.82.

Vance AFB Privatization			
BAH	Moves	Manpower	Proj Mgt
\$ 1,258,241.72	\$ 955,964.91	\$ 208,527.53	\$ 510,147.29
\$ 1,234,888.27	\$ 328,445.53	\$ 204,657.18	\$ 155,077.49
\$ 1,213,769.89	\$ 322,892.10	\$ 201,157.25	\$ 152,425.44
\$ 1,196,225.93	\$ 318,290.50	\$ 198,249.70	\$ 150,222.27
\$ 1,178,935.55	\$ 313,985.12	\$ 195,384.18	\$ 148,050.94
\$ 1,161,895.09	\$ 309,737.98	\$ 192,560.07	\$ 145,911.00
\$ 1,145,100.94	\$ 305,548.29	\$ 189,776.79	\$ 143,801.98
\$ 1,128,549.53	\$ 301,415.27	\$ 187,033.73	\$ 141,723.45
\$ 1,112,237.35	\$ 297,338.15	\$ 184,330.33	\$ 139,674.97
\$ 1,096,160.96	\$ 293,316.19	\$ 181,666.00	\$ 137,656.09
\$ 1,080,316.93	\$ 289,348.62	\$ 179,040.18	\$ 135,666.39
\$ 1,064,701.91	\$ 285,434.73	\$ 176,452.31	\$ 133,705.46
\$ 1,049,312.60	\$ 281,573.78	\$ 173,901.85	\$ 131,772.87
\$ 1,034,145.72	\$ 277,765.05	\$ 171,388.26	\$ 129,868.21
\$ 1,019,198.07	\$ 274,007.84	\$ 168,910.99	\$ 127,991.08
\$ 1,004,466.47	\$ 270,301.46	\$ 166,469.54	\$ 126,141.08
\$ 989,947.81	\$ 266,645.20	\$ 164,063.37	\$ 124,317.82
\$ 975,639.00	\$ 263,038.41	\$ 161,691.98	\$ 122,520.92
\$ 961,537.01	\$ 259,480.40	\$ 159,354.86	\$ 120,749.99
\$ 947,638.85	\$ 255,970.52	\$ 157,051.53	\$ 119,004.66
\$ 933,941.58	\$ 252,508.12	\$ 154,781.49	\$ 117,284.55
\$ 920,442.29	\$ 249,092.55	\$ 152,544.27	\$ 115,589.31
\$ 907,138.12	\$ 245,723.18	\$ 150,339.37	\$ 113,918.57
\$ 894,026.25	\$ 242,399.39	\$ 148,166.35	\$ 112,271.98
\$ 881,103.90	\$ 239,120.56	\$ 146,024.74	\$ 110,649.19
\$ 868,368.33	\$ 235,886.08	\$ 143,914.08	\$ 109,049.85
\$ 855,816.84	\$ 232,695.35	\$ 141,833.93	\$ 107,473.63
\$ 843,446.77	\$ 229,547.78	\$ 139,783.85	\$ 105,920.20
\$ 831,255.50	\$ 226,442.78	\$ 137,763.40	\$ 104,389.22
\$ 819,240.45	\$ 223,379.79	\$ 135,772.15	\$ 102,880.36
\$ 807,399.06	\$ 220,358.23	\$ 133,809.69	\$ 275,210.44
\$ 795,728.83	\$ 217,377.54	\$ 131,875.59	\$ 99,927.77
\$ 784,227.28	\$ 214,437.16	\$ 129,969.45	\$ 98,483.40
\$ 772,891.97	\$ 211,536.56	\$ 128,090.85	\$ 97,059.91
\$ 761,720.51	\$ 208,675.20	\$ 126,239.41	\$ 95,657.00
\$ 750,710.52	\$ 205,852.54	\$ 124,414.74	\$ 94,274.36
\$ 739,859.67	\$ 203,068.06	\$ 122,616.43	\$ 92,911.71
\$ 729,165.66	\$ 200,321.25	\$ 120,844.12	\$ 91,568.76
\$ 718,626.22	\$ 197,611.59	\$ 119,097.43	\$ 90,245.21
\$ 708,239.12	\$ 194,938.58	\$ 117,375.98	\$ 88,940.80
\$ 698,002.16	\$ 192,301.73	\$ 115,679.42	\$ 87,655.24
\$ 687,913.16	\$ 189,700.55	\$ 114,007.37	\$ 86,388.26
\$ 677,969.99	\$ 187,134.55	\$ 112,359.50	\$ 85,139.59
\$ 668,170.54	\$ 184,603.26	\$ 110,735.44	\$ 83,908.98
\$ 658,512.73	\$ 182,106.21	\$ 109,134.86	\$ 82,696.15
\$ 648,994.52	\$ 179,642.94	\$ 107,557.41	\$ 81,500.85
\$ 639,613.88	\$ 177,212.99	\$ 106,002.77	\$ 80,322.83
\$ 630,368.84	\$ 174,815.90	\$ 104,470.59	\$ 79,161.83
\$ 621,257.42	\$ 172,451.24	\$ 102,960.56	\$ 78,017.62
\$ 612,277.70	\$ 170,118.57	\$ 101,472.36	\$ 76,889.94
\$ 44,719,339.42	\$ 12,731,560.26	\$ 7,411,305.26	\$ 6,141,816.89
	Vance Total NPV =	\$ 71,004,021.82	

Table 81: Vance AFB Privatization Estimate

As previously discussed, Scoring is assumed to be zero in the cost estimate model to create the most conservative estimate possible. The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.92 for Vance AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.12.3. Vance AFB Identical FSRM

The Vance AFB identical FSRM estimate included BAH, FSRM Renovation #1, O&M, Utilities, Moves, Manpower, and Out Year Renovation. The complete estimate for the identical FSRM alternative is shown in Table 82, and totaled \$32,157,199.98.

Vance AFB Identical FSRM						
BAH	FSRM Reno 1	O&M	Utilities	Moves	Manpower	Out Year Reno
\$ 1,258,514.24	\$ 1,207,690.82	\$ 63,341.53	\$ 38,239.91	\$ 955,964.91	\$ 254,157.40	
\$ 61,770.55		\$ 62,423.54	\$ 37,685.71	\$ 328,445.53	\$ 249,440.14	
\$ 60,688.49		\$ 61,518.85	\$ 37,139.54	\$ 322,892.10	\$ 245,174.35	
\$ 59,811.30		\$ 60,627.27	\$ 36,601.29	\$ 318,290.50	\$ 241,630.58	
\$ 58,946.78		\$ 59,748.62	\$ 36,070.83	\$ 313,985.12	\$ 238,138.02	
\$ 58,094.75		\$ 58,882.69	\$ 35,548.07	\$ 309,737.98	\$ 234,695.95	
\$ 57,255.05		\$ 58,029.32	\$ 35,032.88	\$ 305,548.29	\$ 231,303.63	
\$ 56,427.48		\$ 57,188.32	\$ 34,525.16	\$ 301,415.27	\$ 227,960.34	
\$ 55,611.87		\$ 56,359.50	\$ 34,024.79	\$ 297,338.15	\$ 224,665.38	
\$ 54,808.05		\$ 55,542.70	\$ 33,531.68	\$ 293,316.19	\$ 221,418.04	
\$ 54,015.85		\$ 54,737.73	\$ 33,045.71	\$ 289,348.62	\$ 218,217.64	
\$ 53,235.10		\$ 53,944.43	\$ 32,566.79	\$ 285,434.73	\$ 215,063.50	
\$ 52,465.63		\$ 53,162.63	\$ 32,094.81	\$ 281,573.78	\$ 211,954.95	
\$ 51,707.29		\$ 52,392.15	\$ 31,629.66	\$ 277,765.05	\$ 208,891.33	
\$ 50,959.90		\$ 51,632.85	\$ 31,171.26	\$ 274,007.84	\$ 205,871.99	
\$ 50,223.32		\$ 50,884.54	\$ 30,719.50	\$ 270,301.46	\$ 202,896.30	
\$ 49,497.39		\$ 50,147.09	\$ 30,274.29	\$ 266,645.20	\$ 199,963.61	
\$ 48,781.95		\$ 49,420.32	\$ 29,835.54	\$ 263,038.41	\$ 197,073.32	
\$ 48,076.85		\$ 48,704.08	\$ 29,403.14	\$ 259,480.40	\$ 194,224.80	
\$ 47,381.94		\$ 47,998.22	\$ 28,977.01	\$ 255,970.52	\$ 191,417.45	
\$ 46,697.08		\$ 47,302.60	\$ 28,557.05	\$ 252,508.12	\$ 188,650.68	
\$ 46,022.11		\$ 46,617.05	\$ 28,143.18	\$ 249,092.55	\$ 185,923.91	
\$ 45,356.91		\$ 45,941.44	\$ 27,735.31	\$ 245,723.18	\$ 183,236.54	
\$ 44,701.31		\$ 45,275.63	\$ 27,333.35	\$ 242,399.39	\$ 180,588.02	
\$ 44,055.19		\$ 44,619.46	\$ 26,937.21	\$ 239,120.56	\$ 177,977.78	
\$ 43,418.42		\$ 43,972.80	\$ 26,546.82	\$ 235,886.08	\$ 175,405.27	
\$ 42,790.84		\$ 43,335.51	\$ 26,162.08	\$ 232,695.35	\$ 172,869.95	
\$ 42,172.34		\$ 42,707.46	\$ 25,782.92	\$ 229,547.78	\$ 170,371.27	
\$ 41,562.78		\$ 42,088.51	\$ 25,409.25	\$ 226,442.78	\$ 167,908.70	
\$ 40,962.02		\$ 41,478.53	\$ 25,041.00	\$ 223,379.79	\$ 165,481.73	
\$ 40,369.95		\$ 40,877.40	\$ 24,678.09	\$ 849,953.16	\$ 163,089.84	\$ 779,382.10
\$ 39,786.44		\$ 40,284.97	\$ 24,320.44	\$ 217,377.54	\$ 160,732.52	
\$ 39,211.36		\$ 39,701.13	\$ 23,967.97	\$ 214,437.16	\$ 158,409.28	
\$ 38,644.60		\$ 39,125.75	\$ 23,620.60	\$ 211,536.56	\$ 156,119.62	
\$ 38,086.03		\$ 38,558.71	\$ 23,278.28	\$ 208,675.20	\$ 153,863.05	
\$ 750,710.52		\$ 37,999.89	\$ 22,940.91	\$ 205,852.54	\$ 151,639.09	
\$ 36,992.98		\$ 37,449.17	\$ 22,608.43	\$ 203,068.06	\$ 149,447.29	
\$ 36,458.28		\$ 36,906.42	\$ 22,280.78	\$ 200,321.25	\$ 147,287.16	
\$ 35,931.31		\$ 36,371.55	\$ 21,957.87	\$ 197,611.59	\$ 145,158.25	
\$ 35,411.96		\$ 35,844.42	\$ 21,639.64	\$ 194,938.58	\$ 143,060.12	
\$ 34,900.11		\$ 35,324.94	\$ 21,326.02	\$ 192,301.73	\$ 140,992.32	
\$ 34,395.66		\$ 34,812.98	\$ 21,016.94	\$ 189,700.55	\$ 138,954.40	
\$ 33,898.50		\$ 34,308.45	\$ 20,712.35	\$ 187,134.55	\$ 136,945.94	
\$ 33,408.53		\$ 33,811.22	\$ 20,412.17	\$ 184,603.26	\$ 134,966.50	
\$ 32,925.64		\$ 33,321.21	\$ 20,116.34	\$ 182,106.21	\$ 133,015.68	
\$ 32,449.73		\$ 32,838.29	\$ 19,824.80	\$ 179,642.94	\$ 131,093.06	
\$ 31,980.69		\$ 32,362.37	\$ 19,537.49	\$ 177,212.99	\$ 129,198.23	
\$ 31,518.44		\$ 31,893.35	\$ 19,254.33	\$ 174,815.90	\$ 127,330.78	
\$ 31,062.87		\$ 31,431.13	\$ 18,975.29	\$ 172,451.24	\$ 125,490.33	
\$ 30,613.88		\$ 30,975.61	\$ 18,700.28	\$ 170,118.57	\$ 123,676.48	
\$ 4,144,770.25	\$ 1,207,690.82	\$ 2,264,224.34	\$ 1,366,934.73	\$ 13,361,155.19	\$ 9,033,042.54	\$ 779,382.10
		Vance Total NPV =	\$ 32,157,199.98			

Table 82: Vance AFB Identical FSRM Estimate

The NPV was determined by utilizing the inflation and discount factors from OMB Circular A-94 as well as the location factor of 0.92 for Vance AFB found in the DoD Area Cost Factors PAX Newsletter. All cost factors included the location factor except BAH, which already has the location factor accounted for at each installation.

4.2.13. Total Consolidated Estimate

The total consolidated estimate utilized the outputs from each individual base to determine the 50-year NPV costs of each alternative. Shown in Table 83, the AETC 50-year NPV cost estimate for the status quo is between \$3,895,883,466.26 and \$5,729,240,391.56. The -15% and +25% is a product of the estimates being square foot estimates (UFC 3-740-05, 2013).

Expense Items	Status Quo		
	- 15%	Estimate	+ 25%
BAH	\$ 581,978,707.03	\$ 684,680,831.80	\$ 855,851,039.76
FSRM Renovation #1	\$ -	\$ -	\$ -
O&M	\$ 561,883,462.42	\$ 661,039,367.56	\$ 826,299,209.45
Utilities	\$ 236,939,362.24	\$ 278,752,190.87	\$ 348,440,238.59
Moves	\$ 2,198,388,900.14	\$ 2,586,339,882.52	\$ 3,232,924,853.15
Manpower	\$ 316,693,034.42	\$ 372,580,040.49	\$ 465,725,050.62
Scoring	\$ -	\$ -	\$ -
Project Management	\$ -	\$ -	\$ -
Out Year Renovation	\$ -	\$ -	\$ -
Total NPV	\$ 3,895,883,466.26	\$ 4,583,392,313.25	\$ 5,729,240,391.56

Table 83: AETC Status Quo Cost Estimate

Shown in Table 84, the AETC 50 year NPV cost estimate for the privatization alternative is between \$13,937,394,207.87 and \$20,496,167,952.76.

Expense Items	Privatization		
	- 15%	Estimate	+ 25%
BAH	\$ 11,427,036,809.80	\$ 13,443,572,717.41	\$ 16,804,465,896.76
FSRM Renovation #1	\$ -	\$ -	\$ -
O&M	\$ -	\$ -	\$ -
Utilities	\$ -	\$ -	\$ -
Moves	\$ 2,354,894,642.91	\$ 2,770,464,285.78	\$ 3,463,080,357.23
Manpower	\$ 72,924,827.01	\$ 85,793,914.12	\$ 107,242,392.65
Scoring	\$ -	\$ -	\$ -
Project Management	\$ 82,537,928.16	\$ 97,103,444.89	\$ 121,379,306.11
Out Year Renovation	\$ -	\$ -	\$ -
Total NPV	\$ 13,937,394,207.87	\$ 16,396,934,362.21	\$ 20,496,167,952.76

Table 84: AETC Privatization Cost Estimate

The final cost estimate alternative, identical FSRM, is shown in Table 85. The cost estimate is between \$5,351,954,707.98 and \$7,870,521,629.38.

Expense Items	Identical FSRM		
	- 15%	Estimate	+ 25%
BAH	\$ 1,459,903,409.96	\$ 1,717,533,423.49	\$ 2,146,916,779.36
FSRM Renovation #1	\$ 192,793,469.81	\$ 226,815,846.84	\$ 283,519,808.55
O&M	\$ 561,883,462.42	\$ 661,039,367.56	\$ 826,299,209.45
Utilities	\$ 236,939,362.24	\$ 278,752,190.87	\$ 348,440,238.59
Moves	\$ 2,459,895,380.67	\$ 2,893,994,565.49	\$ 3,617,493,206.86
Manpower	\$ 316,693,034.42	\$ 372,580,040.49	\$ 465,725,050.62
Scoring	\$ -	\$ -	\$ -
Project Management	\$ -	\$ -	\$ -
Out Year Renovation	\$ 123,846,588.45	\$ 145,701,868.76	\$ 182,127,335.95
Total NPV	\$ 5,351,954,707.98	\$ 6,296,417,303.50	\$ 7,870,521,629.38

Table 85: AETC Identical FSRM Cost Estimate

Based on the individual point estimates as well as the value ranges, the rank-order of least to most expensive alternative with respect to NPV is status quo, identical FSRM, and privatization. Figure 8 details the costs of each alternative over the 50-year cost estimate.

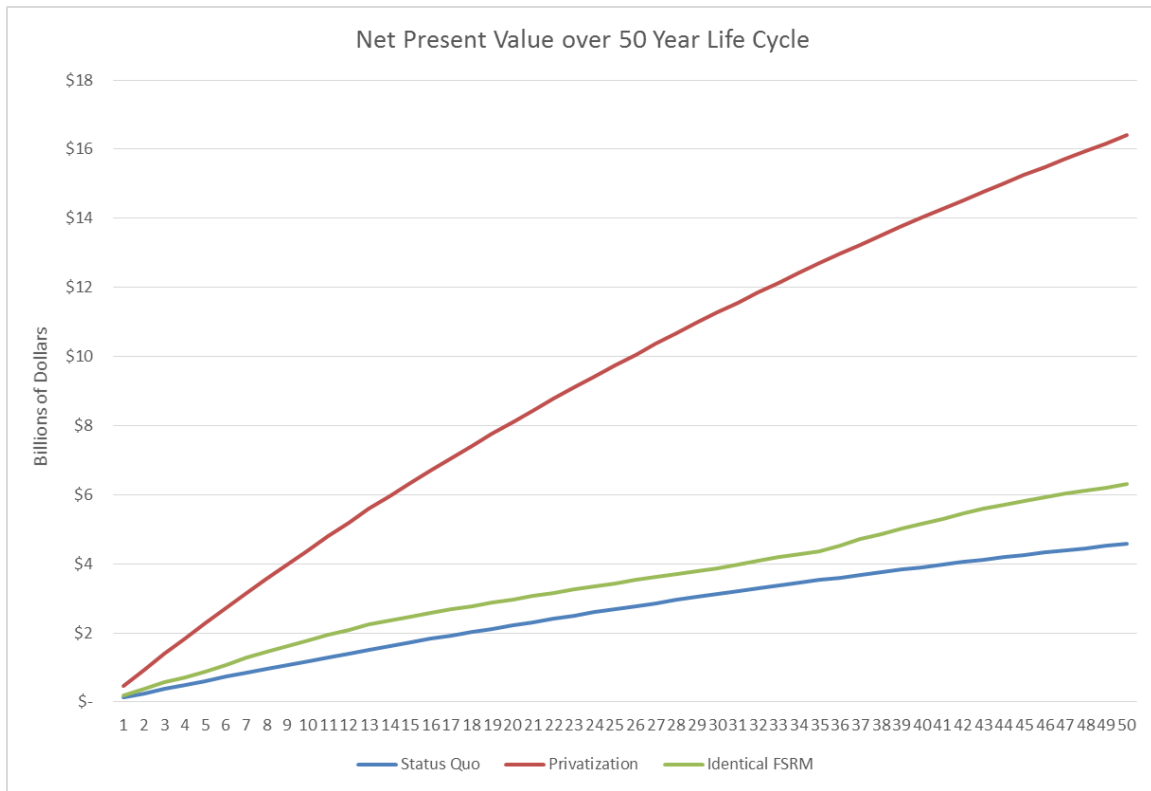


Figure 8: NPV for Each Alternative Over the 50-year Cost Estimate

With the status quo determined to be an unacceptable option moving forward, identical FSRM is the most economical choice between the privatization and identical FSRM alternatives.

4.3. Comparative Analysis

As mentioned in section 4.2.13., the status quo is an unacceptable option moving forward and will not be utilized in the comparative analysis. In the accompanied housing privatization model, sensitivity analyses were performed to determine what factors would change the rank-order of the privatization and identical MILCON alternatives. Sensitivity analyses were not performed in this model because the difference between the -15% privatization model and the +25% identical FSRM model is \$6,384,628,176.94, which is so significant that a -50% to +50% sensitivity analysis of any factor would not present a

change in the rank-order. In the absence of sensitivity analyses, exploratory analyses were performed to determine potential situations that would make privatization an acceptable option.

4.3.1. Exploratory Comparative Analysis

Exploratory comparative analysis was performed to determine if there are any alternative steps or scenarios that could be taken to potentially make privatization more appealing. In each of these scenarios, the cost model is manipulated to lower privatization costs or provide more service for the same price. The four privatization measures analyzed are: 1) pay a percentage of BAH to the contractor per individual living in unaccompanied housing, 2) ensure privatization includes additional facilities for maintenance and performs multiple renovations on the unaccompanied housing, 3) pay a percentage of BAH and the privatization partner cover all moving expenses, or 4) the OMB circular discount values being too conservative combined with each member receiving 25% BAH.

Within the scenario that the base only pays a percentage of the BAH, the contract must be written where only 24.8% or less of each individual's BAH will be taken for this option to be viable. In the event that any higher percentage of BAH is taken from an individual, identical FSRM continues to be the most cost effective alternative. The proposal of lowering BAH to 24.8% originates from the idea that there are four Airmen living in the Dorms-4-Airmen apartment complex. In the accompanied housing privatization model, only the "head" of the house receives BAH, and all of that BAH pays the privatization contractor. In the unaccompanied privatization model, each individual, or four total BAHs, will be paid to the privatization contractor for one apartment. For the privatization alternative to become a viable financial alternative for unaccompanied

housing, the Air Force must negotiate with the privatized contractors to secure partial BAH figures that would make fiscal sense. The privatized contractors will implore that there are four working restrooms and baths, and attempt to keep the BAH rates high, where only paying 24.8% of BAH will likely not be agreed upon by the privatized contractors. Although lowering individual BAH is one viable option to reducing privatization costs, adding facilities and performing multiple renovations on the unaccompanied housing facilities could make privatization more valuable.

The total point estimate of renovating the 16% unaccompanied housing units that needs renovating across AETC is \$372,517,715.60. However, to increase the privatization value, 100% of the unaccompanied housing units should be renovated. This brings the total compared value of the renovations to \$2.33B. Although adding additional facilities to be renovated and perform maintenance would increase the value of privatization, the \$10.1B discrepancy between the privatization and identical FSRM alternatives indicates that at least double the number of facilities on each base must be privatized. Throughout AETC, 164 dormitory facilities were analyzed, and the total value of 100% renovation (FSRM Renovation #1 and out-year renovation) was only \$2.33B. The move from 16% renovation to 100% renovation brought the total identical FSRM value to \$8.25B. Without having each installation's complete facility inventory data, a rough estimate would be that doubling the number of facilities to 328 would bring the total identical FSRM value to \$16.5B, which makes privatization a more cost effective alternative holding all privatization costs the same. With the understanding that different facilities have different costs, this comparative analysis is meant to show how much more work would need to be accomplished to make privatization a better alternative.

The third comparative analysis scenario involves lowering the BAH rate for each individual and having the privatization contract written to where the privatization company pays for all moving expenses. In this scenario, the privatization costs for the Air Force are lowered by \$2.77B to \$13.6B. The BAH must be lowered to 45.4% for each individual to ensure that privatization becomes the most economical solution. Through lowering the BAH to 45.4% per individual and paying all moving costs, the privatization alternative has less total cost than the identical FSRM alternative. Each of the first three scenarios assumes that the OMB circular is correct and can be utilized for the entire 50-year life of unaccompanied housing. The final scenario investigates the OMB circular's potential to be conservative, and how that may change the rank-order of the privatization and identical FSRM alternatives.

The final comparative analysis scenario originates from the idea that the OMB circular has the potential to be overly conservative, and a higher discount rate combined with paying 25% of individual members BAH may potentially make privatization a more attractive option. Figure 9 details how the discount rate changed from April, 1971 through April, 2001 (Federal Reserve Bank of San Francisco, 2002).

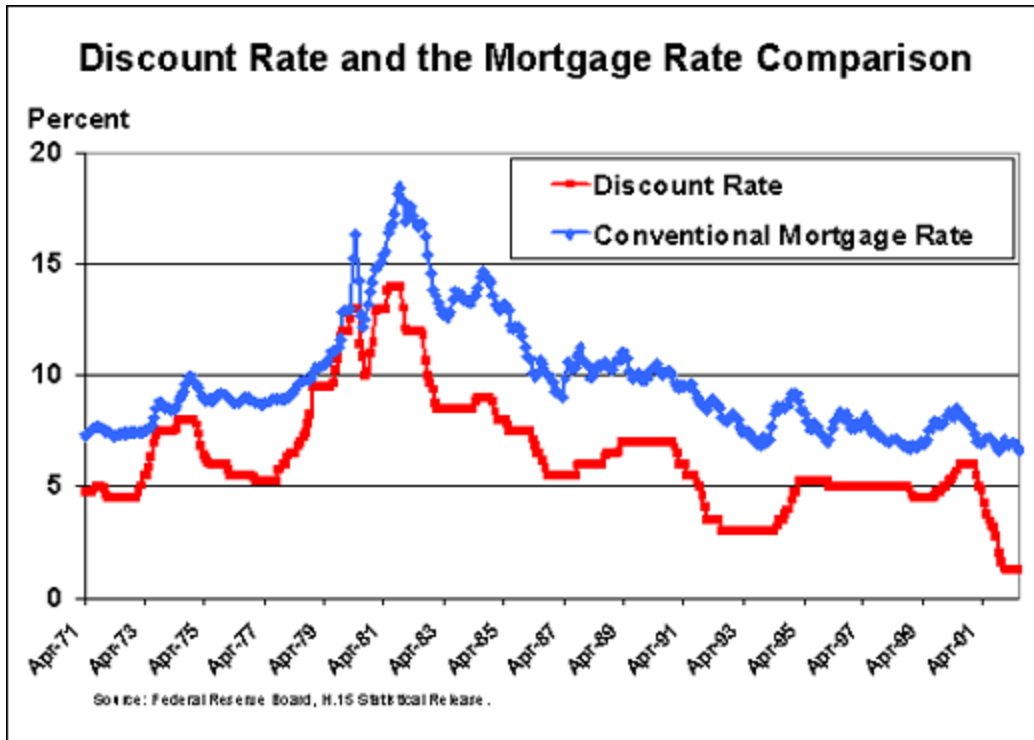


Figure 9: 30-year Rate Comparison (Federal Reserve Bank of San Francisco, 2002)

In Figure 9, the discount rate fluctuated from a high of 14% in April, 1981 to a low of 2% in post April, 2001. The history of discount rates show that the estimated 3.5% utilized in the OMB circular has the potential to be overly conservative, and drives us to analyze the data at a discount rate of 7.5%. The 7.5% is based on the recent conservative discount rates experienced since April, 2001 combined with the information gathered from April, 1971.

Figure 10 details the change in costs associated with each alternative when the 7.5% discount rate is applied. The point cost of the privatization alternative is decreased from approximately \$16.4B to \$8B. While each other alternative decreased as well, privatization experienced the largest decrease totaling approximately \$8.4B. This is a much larger decrease when compared to the \$2.4B decrease experienced in the status quo, and the \$3.3B decrease found in the identical FSRM alternative.

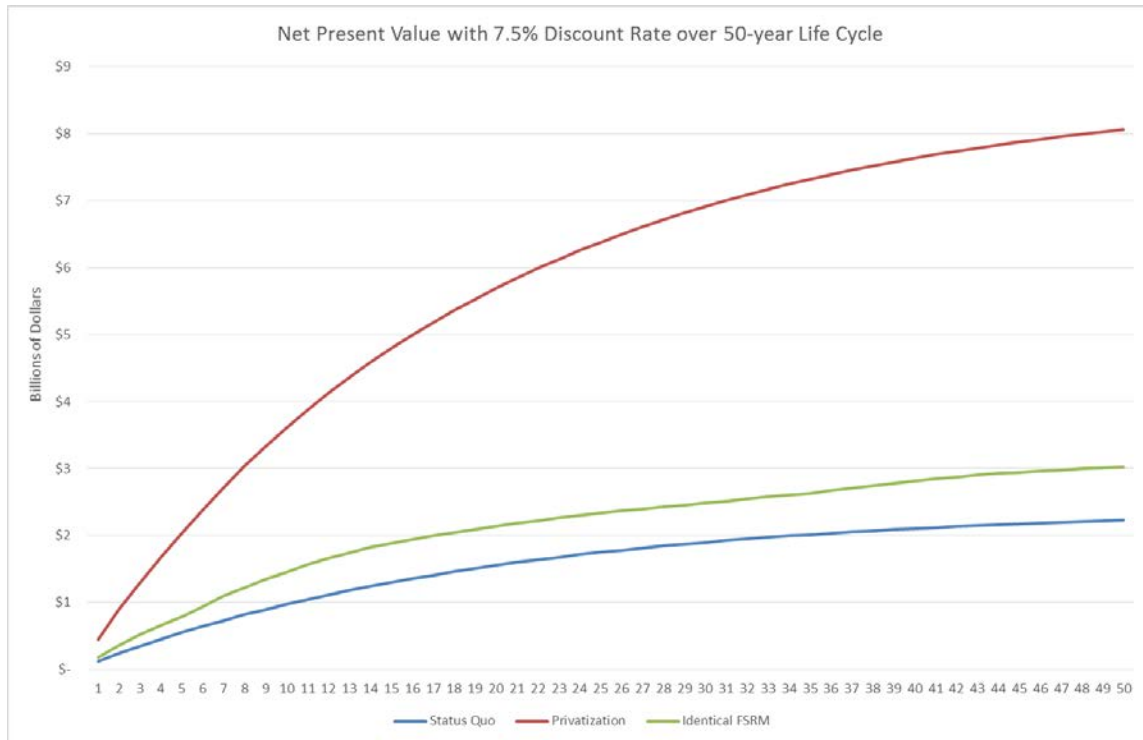


Figure 10: Net Present Value with 7.5% Discount Rate over 50-year Life Cycle

Table 86 describes the changes in BAH, O&M, Utilities, Moves, and Manpower over the 50-year life cycle in the status quo alternative of unaccompanied housing. The aforementioned \$2.4B decrease is shown based on the previous point estimate of approximately $\$4.6\text{B} - \$2.2\text{B} = \$2.4\text{B}$.

Expense Items	Status Quo		
	- 15%	Estimate	+ 25%
BAH	\$ 282,398,789.13	\$ 332,233,869.56	\$ 415,292,336.96
FSRM Renovation #1	\$ -	\$ -	\$ -
O&M	\$ 274,388,375.53	\$ 322,809,853.56	\$ 403,512,316.95
Utilities	\$ 115,706,211.43	\$ 136,124,954.63	\$ 170,156,193.28
Moves	\$ 1,066,744,119.56	\$ 1,254,993,081.84	\$ 1,568,741,352.30
Manpower	\$ 154,650,607.90	\$ 181,941,891.65	\$ 227,427,364.57
Scoring	\$ -	\$ -	\$ -
Project Management	\$ -	\$ -	\$ -
Out Year Renovation	\$ -	\$ -	\$ -
Total NPV	\$ 1,893,888,103.55	\$ 2,228,103,651.24	\$ 2,785,129,564.05

Table 86: Status Quo NPV with 7.5% Discount Rate over 50-year Life Cycle

The total point estimate price of the privatization alternative will be approximately \$3.1B, as shown in Table 87, when the 7.5% discount rate is used and individual members are paid 25% of their BAH. While this is a substantial decrease from the original \$16.4B estimate, privatization continues to be the most costly unaccompanied housing alternative.

Expense Items	Privatization		
	- 15%	Estimate	+ 25%
BAH	\$ 1,395,040,304.89	\$ 1,641,223,888.11	\$ 2,051,529,860.14
FSRM Renovation #1	\$ -	\$ -	\$ -
O&M	\$ -	\$ -	\$ -
Utilities	\$ -	\$ -	\$ -
Moves	\$ 1,188,736,906.30	\$ 1,398,514,007.41	\$ 1,748,142,509.27
Manpower	\$ 35,611,357.38	\$ 41,895,714.56	\$ 52,369,643.20
Scoring	\$ -	\$ -	\$ -
Project Management	\$ 43,925,822.82	\$ 51,677,438.61	\$ 64,596,798.27
Out Year Renovation	\$ -	\$ -	\$ -
Total NPV	\$ 2,663,314,391.39	\$ 3,133,311,048.70	\$ 3,916,638,810.87

Table 87: Privatization NPV with 7.5% Discount Rate and 25% Paid BAH

Table 88 describes the changes in BAH, FSRM #1, O&M, Utilities, Moves, Manpower, and Out Year Renovations over the 50-year life cycle in the identical FSRM

alternative of unaccompanied housing. The aforementioned \$3.3B decrease is shown based on the previous point estimate of approximately \$6.3B-\$3B = \$3.3B.

Expense Items	Identical FSRM		
	- 15%	Estimate	+ 25%
BAH	\$ 628,508,553.28	\$ 739,421,827.39	\$ 924,277,284.23
FSRM Renovation #1	\$ 150,160,387.91	\$ 176,659,279.90	\$ 220,824,099.87
O&M	\$ 274,388,375.53	\$ 322,809,853.56	\$ 403,512,316.95
Utilities	\$ 115,706,211.43	\$ 136,124,954.63	\$ 170,156,193.28
Moves	\$ 1,214,926,175.47	\$ 1,429,324,912.31	\$ 1,786,656,140.39
Manpower	\$ 154,650,607.90	\$ 181,941,891.65	\$ 227,427,364.57
Scoring	\$ -	\$ -	\$ -
Project Management	\$ -	\$ -	\$ -
Out Year Renovation	\$ 30,946,580.08	\$ 36,407,741.27	\$ 45,509,676.59
Total NPV	\$ 2,569,286,891.60	\$ 3,022,690,460.71	\$ 3,778,363,075.88

Table 88: Identical FSRM NPV with 7.5% Discount Rate over 50-year Life Cycle

Figure 11 details the final comparison between status quo, privatization and identical FSRM with respect to the 7.5% discount rate and 25% reduction in BAH.

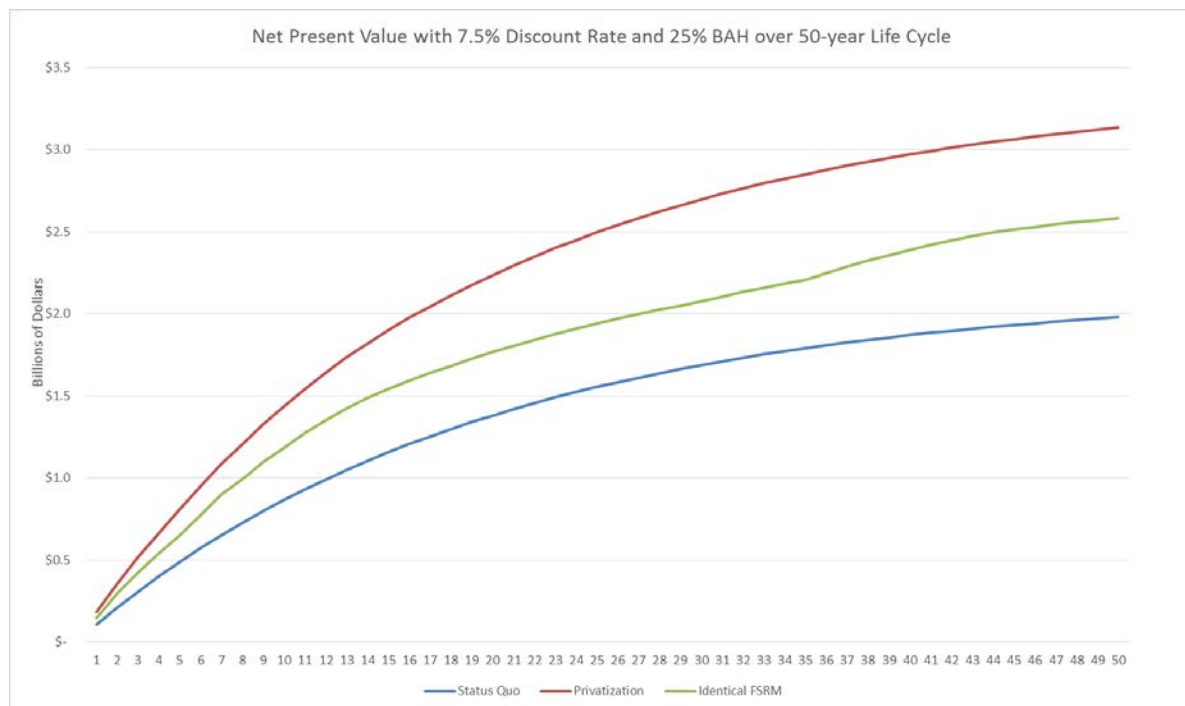


Figure 11: NPV with 7.5% Discount Rate and 25% BAH reduction over 50-years

In each of the comparative analysis scenarios, a large amount of BAH reduction must occur and/or additional facilities must be added to the maintenance list to make the privatization alternative more valuable. Reducing BAH and adding additional facilities brings additional burden and risks to the Air Force that will not be analyzed; however, the risks associated with the status quo, privatization and identical FSRM alternatives will be analyzed to ensure the best alternative is selected, not the cheapest.

4.4. Risk Assessment Model

The risk assessment model utilizes the first three steps of the Air Force 5-Step Risk Management Process. In each of the three alternatives; status quo, privatization, and identical FSRM; the risks associated with each will be identified, assessed, and categorized to ensure the best decision is made between the unaccompanied housing alternatives. The Air Force risk assessment matrix shown in Figure 6 is used to subjectively determine the risk assessment levels for each alternative. The individual risks are outlined, assessment level is determined, and the reasoning is explained for each unaccompanied housing alternative.

4.4.1. Status Quo Risk

In the status quo alternative, the three major risks involved are quality of life, unfunded FSRM requirements, and complete building failure. Each of these risks is analyzed to ensure the best possible decision is made between all alternatives; status quo, privatization, and identical FSRM.

- Quality of Life: EH

The quality of life concern is Extremely High based on the 16% of current inventory that is inadequate coupled with the aforementioned risks taken in infrastructure. The severity rating is critical, and the probability level is frequent.

- Unfunded FSRM Requirements: EH

The unfunded FSRM requirements risk is Extremely High based on the aforementioned risk taken in infrastructure, current inability to meet FSRM requirements, and future years showing a lower level of FSRM funding compared to plant replacement value. The severity rating is critical, and the probability level is frequent.

- Complete Building Failure: M

The complete building failure risk is Medium based on the impact and likelihood that it could occur. The severity rating is catastrophic, but the probability level is unlikely.

- Surge in O&M costs: M

The surge in O&M costs risk is Medium based on the impact and likelihood that it could occur. The severity rating is moderate as there will be degraded mission capability, but not mission failure. The probability level is likely based on the fact that O&M costs fluctuate continuously.

- Change in BAH Rates: H

The change in BAH rates risk is High based on the impact and likelihood of occurrence. The severity rating is critical based on individual families not being able to pay rent if significant drops were to occur. The probability level is occasional as new BAH rates are released every year.

- Governmental collapse based on economic instability: M

The governmental collapse concern based on economic instability concern is Medium because the likelihood of a United States governmental collapse is not high. The severity rating is catastrophic, but the probability level is unlikely.

- Response Time to Emergencies: L

The response time to emergencies concern is low based on the fact that nothing is changing in this alternative. The severity rating is critical, and the probability is unlikely.

- Unsupervised Airmen: L

The unsupervised Airmen concern is low based on the normal concern associated with Airmen. In this alternative, nothing is changed; however, unsupervised Airmen is always a low concern. The severity rating is moderate, and the probability is seldom.

- Changing Air Force Needs and Current Contractual Obligations: N/A

There are no long-term contracts in this scenario that would cause the changing needs of the Air Force to affect current contractual obligations.

- Private Entity Bankruptcy: N/A

The government will not be working with a private entity that could become bankrupt

- High Rates and Poor Service: N/A

The lack of construction or renovation in this alternative renders high rates and poor service a non-issue.

- BRAC and Military Reductions: H

BRAC and military reductions is a concern based on the fact that as the Air Force needs change, individual installations may close and the military may be reduced at other

locations. This would cause changes in the current landscape in each alternative. The severity rating is critical, and the probability level is occasional.

Although there are only nine risks identified for the status quo, four of these risks are critical or catastrophic in severity. The critical or catastrophic nature of each risk identified led to the decision that privatization or identical FSRM must be undertaken to alleviate the impacts of the status quo.

4.4.2. Privatization Risk

In the privatization alternative, the major risks involved are governmental collapse based on economic instability, response time to emergencies, unsupervised airmen, degraded esprit-de-corps, inability to meet Air Force fill-rate, changing Air Force needs and current contractual obligations, private entity bankruptcy, high rates and poor service, changes in BAH rates, and BRAC and military reductions. Each of these risks is analyzed to ensure the best possible decision is made between all alternatives.

- Quality of Life: L

The quality of life concern is Low based on the fact that privatization is a guaranteed money stream and the inadequate unaccompanied housing will be corrected. The severity rating is critical, and the probability level is unlikely

- Unfunded FSRM Requirements: N/A

As stated before, privatization is a guaranteed funding stream and it does not rely on FSRM funding.

- Complete Building Failure: M

The complete building failure risk is Low based on the impact and likelihood that it could occur. The severity rating is catastrophic, but the probability level is unlikely.

- Surge in O&M costs: M

The surge in O&M costs risk is Medium based on the impact and likelihood that it could occur. The severity rating is moderate as there will be degraded mission capability, but not mission failure. The probability level is likely based on the fact that O&M costs fluctuate continuously.

- Change in BAH Rates: M

The change in BAH rates concern is based on the fact that BAH rates fluctuate with the economy, and they may drastically change over a 50-year life. An extreme increase and/or decrease in BAH rates could potentially cause a huge contractual problem that the contract language must take into account. The severity rating is critical, and the probability level is seldom.

- Governmental collapse based on economic instability: M

The governmental collapse concern based on economic instability concern is Medium because the likelihood of a United States governmental collapse is not high. The severity rating is catastrophic, but the probability level is unlikely.

- Response Time to Emergencies: H

The response time to emergencies concern is based on the clearance needed and up-channeling of problems that could be slowed through privatization. The severity rating is catastrophic, and the probability is seldom.

- Unsupervised Airmen: M

The unsupervised Airmen concern is based on contractual obligations that would not allow for normal military checks of dormitories. Contractual language must include the ability for the Commander and First Sergeant to visit rooms to ensure that unit integrity is kept

and esprit-de-corps is not degraded. The severity rating is moderate, and the probability is likely.

- Changing Air Force Needs and Current Contractual Obligations: H

The changing Air Force needs and current contractual obligations concern is based on the fact that Air Force needs are fluid and a 50-year contract will not leave room for the needs of tomorrow. The contract itself must be made with the ability to update needs based on the changing times. The severity rating is critical, and the probability is likely.

- Private Entity Bankruptcy: M

The private entity bankruptcy concern is Medium because the likelihood of the private entity that we contract with going bankrupt after intense scrutiny is not high. The severity rating is catastrophic, but the probability level is low.

- High Rates and Poor Service: H

The high rates and poor service concern is based on the feedback from the Air Force privatization of utilities. In many cases, the Air Force was charged a premium, and service was poor. The severity rating is critical, and the probability level is occasional.

- BRAC and Military Reductions: H

The BRAC and military reductions concern is based on the fact that as the Air Force needs change, individual installations may close and the military may be reduced at other locations. This would cause contractual problems that the contract language must take into account. The severity rating is critical, and the probability level is occasional.

As mentioned in Chapter 2, contractual relationships with a private or other governmental entity poses additional and unique risks. These risks are shared and taken to provide a ‘win-win’ scenario for both parties. The risks in the privatization alternative

must be weighed to determine if privatization is the best option with respect to unaccompanied housing

4.4.3. Identical FSRM Risk

In the identical FSRM alternative, the two major risks involved are quality of life, and unfunded FSRM requirements. Both of these risks are analyzed to ensure the best possible decision is made between all alternatives.

- Quality of Life: M

The quality of life concern is Medium based on the 16% of current inventory that is inadequate coupled with the aforementioned risks taken in infrastructure. However, project funding and a concerted effort to upgrade the current facilities will be made under the identical FSRM alternative. The severity rating is critical, and the probability level is seldom.

- Unfunded FSRM Requirements: EH

The unfunded FSRM requirements risk is Extremely High based on the aforementioned risk taken in infrastructure, current inability to meet FSRM requirements, and future years showing a lower level of FSRM funding compared to plant replacement value. The severity rating is critical, and the probability level is frequent.

- Complete Building Failure: M

The complete building failure risk is Medium based on the impact and likelihood that it could occur. The severity rating is catastrophic, but the probability level is unlikely.

- Surge in O&M Costs: M

The surge in O&M costs risk is Medium based on the impact and likelihood that it could occur. The severity rating is moderate as there will be degraded mission capability, but not

mission failure. The probability level is likely based on the fact that O&M costs fluctuate continuously.

- Change in BAH Prices: M

The change in BAH rates risk is High based on the impact and likelihood of occurrence. The severity rating is critical based on individual families not being able to pay rent if significant drops were to occur. The probability level is occasional as new BAH rates are released every year.

- Governmental collapse based on economic instability: M

The governmental collapse concern based on economic instability concern is Medium because the likelihood of a United States governmental collapse is not high. The severity rating is catastrophic, but the probability level is unlikely.

- Response Time to Emergencies: L

The response time to emergencies concern is low based on the fact that nothing is changing in this alternative. The severity rating is critical, and the probability is unlikely.

- Unsupervised Airmen: L

The unsupervised Airmen concern is low based on the normal concern associated with Airmen. In this alternative, nothing is changed; however, unsupervised Airmen is always a low concern. The severity rating is moderate, and the probability is seldom.

- Changing Air Force Needs and Current Contractual Obligations: N/A

There are no long-term contracts in this scenario that would cause the changing needs of the Air Force to affect current contractual obligations.

- Private Entity Bankruptcy: L

The private entity bankruptcy concern is Low because the likelihood of the private entity that we contract with for construction going bankrupt after intense scrutiny is not high. Also, there are contractual provisions for other avenues to complete the work. The severity rating is moderate, but the probability level is seldom.

- High Rates and Poor Service: H

The high rates and poor service concern is based on the potential for poor construction of new unaccompanied housing units. Although poor construction techniques do occur, there are contractual provisions as well as inspections taking place to minimize those occurrences. The severity rating is moderate, and the probability level is seldom.

- BRAC and Military Reductions: H

The BRAC and military reductions concern is based on the fact that as the Air Force needs change, individual installations may close and the military may be reduced at other locations. This would cause contractual problems that the contract language must take into account. The severity rating is critical, and the probability level is occasional.

Many of the 11 risks identified for the identical FSRM alternative are repeated from the status quo alternative; however, the quality of life concern is mitigated based on the decision to move forward and renovate the existing facilities. When choosing the identical FSRM alternative, the probability is lowered to seldom, and the overall assessment is Medium.

Through the risk analysis presented, identical FSRM and the status quo have the lowest total risk. Figure 89 outlines the recurring risks, described in each alternative associated with unaccompanied housing, and provides the overall comparison.

	Quality of Life	Unfunded FSRM Requirements	Complete Building Failure	Surge in O&M Costs	Change in BAH Rates	Governmental Collapse based on Economic Instability	Response Time to Emergencies	Unsupervised Airmen	Changing Air Force Needs and Current Contractual Obligations	Private Entity Bankruptcy	High Rates and Poor Service	BRAC and Military Reductions	Risk Assessment Score
Status Quo	4	4	2	2	3	2	1	1	0	0	0	3	1.83
Privatization	1	0	2	2	3	2	3	2	3	2	3	3	2.17
Identical FSRM	2	4	2	2	3	2	1	1	0	1	1	3	1.83

Risk Level Scale	
0	Not Applicable
1	Low
2	Medium
3	High
4	Extremely High

Figure 89: Risk Comparison and Scale

In the risk assessment model, the privatization and identical FSRM alternatives have the highest number of risks, but identical FSRM is tied with the status quo for the lowest average risk score.

V. Conclusions and Recommendations

The chapter presents the conclusions from this research. The significance of the research is explained as well as specific actions regarding the implementation of the research's findings. Finally, future research is identified to strengthen the model's results and to address the unaccompanied housing inadequacy problem.

5.1. Significance of Research

This research has justified the decision to utilize Air Education and Training Command (AETC) as the sample to determine whether the status quo, privatization and identical FSRM were the best unaccompanied housing alternative. Through the AETC unaccompanied housing research, divestiture does not provide unaccompanied housing cost savings. Identical FSRM is found to be the most economical solution to unaccompanied housing.

The AETC study found a \$10.1B cost savings through identical FSRM compared to privatization. As mentioned in Chapter 1, AETC is an 'average' major command (MAJCOM) and the cost savings can be spread across the other MAJCOMs. With the Air Force being comprised of 10 MAJCOMs, the potential savings through the identical FSRM options is \$101B over 50 years. The potential cost savings across the Air Force is a significant finding in this research.

5.2. Recommendation for Action

Through each phase of the analysis, the identical FSRM option clearly dominated as the best unaccompanied housing strategy moving forward. The research described a cost savings of \$10,100,517,058.70 through the implementation of identical FSRM when compared to privatization. In the comparative analyses, the BAH cost factor must be

manipulated and/or additional facilities must be added to ensure equal value is experienced within the privatization alternative. Furthermore, the identical FSRM alternative contained five risks compared to the eight risks identified in the privatization alternative.

The identical FSRM alternative was the second in the rank-order between status quo, privatization and identical FSRM. However, if the status quo was under-estimated and came in at the +25% threshold and identical FSRM was over-estimated and came in at the -15% threshold, identical FSRM would be the lowest cost alternative. When compared to privatization, identical FSRM is substantially cheaper, and the only scenario where the rank order changes a substantial decrease in BAH paid to individual members.

The comparative analysis directly compared the identical FSRM and privatization alternatives. This exploratory analysis concluded that a substantial BAH decrease of 24.8% would be necessary to change the rank-order of cost. Additionally, roughly double the inventory of facilities 328 versus 164 as well as every unaccompanied housing facility must be fully renovated to change the rank-order between identical FSRM and privatization. The comparative analysis also determined that privatization must pay for all moving expenses and reduce individual BAH rates to 45.4% for privatization to be the most economical option. Finally, the comparative analysis found that even with a 7.5% discount factor, the Air Force can only pay each individual less than 25% of their BAH for privatization to be the best economic choice. In each of these scenarios, risk would be greatly affected, and the risks associated with each original scenario provided the final evidence that identical FSRM is the best option for unaccompanied housing.

The risk assessment model determined that status quo owned four substantial risks and nine total risks, privatization as well as identical FSRM held 11 risks. Each substantial

risk for the status quo alternative was either catastrophic or critical, and the probability was high enough to warrant the status quo as an unacceptable option. The 11 privatization risks were tied with identical FSRM as the most; however, the severity and probability of the 11 privatization risk gave it an overall worst average score. The lower severity and probability of the risks aided in determining that identical FSRM is the least risky of the options moving forward. Due to the cost as well as the risk associated with each option, identical FSRM is the most economic alternative for unaccompanied housing and is the recommended alternative.

5.3. Recommendations for Future Research

There are several assumptions and limitations of this research that could be addressed by follow-on efforts. The following are future research suggestions:

1. An economic analysis distinguishing between Officer and Enlisted Dormitories using same MAJCOM.
2. An economic analysis distinguishing between actual unaccompanied housing and temporary lodging using same MAJCOM.
3. An economic analysis using differing MAJCOM(s).
4. In-depth study of college and university dormitory privatization and potential translation to Air Force installations.

Recommendations 1-3 attack the assumptions that 1) all dormitories on each base are used by E-1 through E-4 Airmen, 2) all facilities categorized as dormitories are dormitories and none are temporary lodging facilities, and 3) that AETC will provide the same findings as other MAJCOMs with differing missions. The final recommendation for future research is applying the college and university dormitory privatization model to Air Force

unaccompanied housing to determine whether costs are identified and classified different, and whether cost savings can potentially be recognized through the college and university model. Each of these follow-on efforts will strengthen the current research and provide opportunity for Air Force cost savings.

Appendix

Individual Base Data

Altus Data		Columbus Data		Ft Sam Houston Data		Goodfellow Data		Keesler Data		Lackland Data	
Year	O&M Cost Data	Year	O&M Cost Data	Year	O&M Cost Data	Year	O&M Cost Data	Year	O&M Cost Data	Year	O&M Cost Data
2008	\$ 156,753.91	2008	\$ 114,714.64	2014	\$ 1,790,679.04	2008	\$ 847,968.20	2008	\$ 2,891,206.74	2008	\$ 2,328,768.91
2009	\$ 263,413.75	2009	\$ 99,060.95	2015	\$ 1,929,549.40	2009	\$ 1,120,077.47	2009	\$ 1,745,062.68	2009	\$ 693,789.32
2010	\$ 177,596.95	2010	\$ 147,773.82			2010	\$ 985,488.94	2010	\$ 3,113,157.94	2010	\$ 2,253,770.36
2011	\$ 576,064.02	2011	\$ 89,032.47	Mean	\$ 1,860,114.22	2011	\$ 5,288,101.81	2011	\$ 6,215,362.81	2011	\$ 9,183,285.15
2012	\$ 547,494.19	2012	\$ 68,252.05	Median	\$ 1,860,114.22	2012	\$ 1,888,609.69	2012	\$ 2,215,712.34	2012	\$ 12,543,304.69
2013	\$ 3,510,474.01	2013	\$ 143,981.76	Range	\$ 138,870.36	2013	\$ 1,755,866.00	2013	\$ 1,090,827.73	2013	\$ 2,884,399.59
2014	\$ 1,260,470.13	2014	\$ 243,611.62	Std Dev	\$ 69,435.18	2014	\$ 972,027.82	2014	\$ 1,130,200.01	2014	\$ 22,302,925.26
2015	\$ 216,026.93	2015	\$ 132,701.33			2015	\$ 1,399,725.08	2015	\$ 7,721,921.27	2015	\$ 2,891,916.31
Mean	\$ 838,536.74	Mean	\$ 129,891.08			Mean	\$ 1,782,233.13	Mean	\$ 3,265,431.44	Mean	\$ 6,885,269.95
Median	\$ 405,453.97	Median	\$ 123,707.99			Median	\$ 1,259,901.28	Median	\$ 2,553,459.54	Median	\$ 2,888,157.95
Range	\$ 3,353,720.10	Range	\$ 175,359.57			Range	\$ 4,440,133.61	Range	\$ 5,124,535.08	Range	\$ 21,609,135.94
Std Dev	\$ 1,065,998.85	Std Dev	\$ 50,135.09			Std Dev	\$ 1,371,676.61	Std Dev	\$ 2,275,609.09	Std Dev	\$ 6,959,697.24
Laughlin Data		Luke Data		Maxwell Data		Randolph Data		Sheppard Data		Vance Data	
Year	O&M Cost Data	Year	O&M Cost Data	Year	O&M Cost Data	Year	O&M Cost Data	Year	O&M Cost Data	Year	O&M Cost Data
2008	\$ 67,175.73	2008	\$ 63,693.45	2008	\$ 874,301.71	2008	\$ 162,497.29	2008	\$ 7,258,135.25	2008	\$ 26,196.42
2009	\$ 134,874.85	2009	\$ 80,537.71	2009	\$ 85,402.60	2009	\$ 190,879.39	2009	\$ 6,051,931.74	2009	\$ 37,579.72
2010	\$ 177,161.06	2010	\$ 286,015.00	2010	\$ 485,481.14	2010	\$ 3,053.52	2010	\$ 2,013,641.33	2010	\$ 77,478.26
2011	\$ 452,904.60	2011	\$ 526,720.97	2011	\$ 1,701,056.91	2011	\$ 520,611.79	2011	\$ 2,619,371.18	2011	\$ 80,206.45
2012	\$ 577,484.43	2012	\$ 231,186.74	2012	\$ 6,799,882.99	2012	\$ 213,542.82	2012	\$ 1,186,326.32	2012	\$ 71,774.91
2013	\$ 244,991.09	2013	\$ 293,218.04	2013	\$ 3,609,265.10	2013	\$ 413,351.58	2013	\$ 2,425,874.22	2013	\$ 87,651.42
2014	\$ 611,584.71	2014	\$ 432,002.92	2014	\$ 646,231.26	2014	\$ 1,824,142.40	2014	\$ 2,060,064.82	2014	\$ 86,177.41
2015	\$ 1,548,339.62	2015	\$ 306,901.67	2015	\$ 251,044.93	2015	\$ 511,718.08	2015	\$ 2,020,789.83	2015	\$ 84,558.20
Mean	\$ 476,814.51	Mean	\$ 277,534.56	Mean	\$ 1,806,583.33	Mean	\$ 479,974.61	Mean	\$ 3,204,516.84	Mean	\$ 68,952.85
Median	\$ 348,947.85	Median	\$ 289,616.52	Median	\$ 760,266.49	Median	\$ 313,447.20	Median	\$ 2,242,969.52	Median	\$ 78,842.36
Range	\$ 1,481,163.89	Range	\$ 463,027.52	Range	\$ 6,714,480.39	Range	\$ 1,821,088.88	Range	\$ 6,071,808.93	Range	\$ 61,455.00
Std Dev	\$ 447,953.14	Std Dev	\$ 147,401.90	Std Dev	\$ 2,166,127.84	Std Dev	\$ 535,804.56	Std Dev	\$ 2,052,149.21	Std Dev	\$ 22,106.35

Dormitory Cost Data

Dormitory Cost/SF									
Non-Union	Union								
\$ 176.07	\$ 191.34								
Base	Facility	SF	New Construction Cost	Demolition Cost	New Dorm Cost	Full Renovation Cost	PRSNL	BAH	Utilities
Altus	213	39667	\$ 7,589,883.78	\$ 1,150,343.00	\$ 8,740,226.78	\$ 6,118,158.75	112	\$ 856,807.20	\$ 32,130.27
	316	25467	\$ 4,872,855.78	\$ 738,543.00	\$ 5,611,398.78	\$ 3,927,979.15	72	\$ 550,087.20	\$ 20,628.27
	331	33750	\$ 6,457,725.00	\$ 978,750.00	\$ 7,436,475.00	\$ 5,205,532.50	95	\$ 729,000.00	\$ 27,337.50
	333	33750	\$ 6,457,725.00	\$ 978,750.00	\$ 7,436,475.00	\$ 5,205,532.50	95	\$ 729,000.00	\$ 27,337.50
Columbus	550	18740	\$ 3,585,711.60	\$ 543,460.00	\$ 4,129,171.60	\$ 2,890,420.12	53	\$ 412,385.58	\$ 15,179.40
	555	16724	\$ 3,199,970.16	\$ 484,996.00	\$ 3,684,966.16	\$ 2,579,476.31	47	\$ 368,022.22	\$ 13,546.44
	956	23013	\$ 4,403,307.42	\$ 667,377.00	\$ 5,070,684.42	\$ 3,549,479.09	65	\$ 506,415.65	\$ 18,640.53
Ft Sam	257	37893	\$ 7,250,446.62	\$ 1,098,897.00	\$ 8,349,343.62	\$ 5,844,540.53	107	\$ 1,456,372.09	\$ 30,693.33
	272	99888	\$ 19,112,569.92	\$ 2,896,752.00	\$ 22,009,321.92	\$ 15,406,525.34	281	\$ 3,839,075.70	\$ 80,909.28
	590	21921	\$ 4,194,364.14	\$ 635,709.00	\$ 4,830,073.14	\$ 3,381,051.20	62	\$ 842,507.39	\$ 17,756.01
	591	21921	\$ 4,194,364.14	\$ 635,709.00	\$ 4,830,073.14	\$ 3,381,051.20	62	\$ 842,507.39	\$ 17,756.01
	904	23900	\$ 4,573,026.00	\$ 693,100.00	\$ 5,266,126.00	\$ 3,686,288.20	67	\$ 918,567.89	\$ 19,359.00
	905	22020	\$ 4,213,306.80	\$ 638,580.00	\$ 4,851,886.80	\$ 3,396,320.76	62	\$ 846,312.34	\$ 17,836.20
	907	22020	\$ 4,213,306.80	\$ 638,580.00	\$ 4,851,886.80	\$ 3,396,320.76	62	\$ 846,312.34	\$ 17,836.20
	915	21930	\$ 4,196,086.20	\$ 635,970.00	\$ 4,832,056.20	\$ 3,382,439.34	62	\$ 842,853.30	\$ 17,763.30
	916	22020	\$ 4,213,306.80	\$ 638,580.00	\$ 4,851,886.80	\$ 3,396,320.76	62	\$ 846,312.34	\$ 17,836.20
	920	21930	\$ 4,196,086.20	\$ 635,970.00	\$ 4,832,056.20	\$ 3,382,439.34	62	\$ 842,853.30	\$ 17,763.30
	929	21930	\$ 4,196,086.20	\$ 635,970.00	\$ 4,832,056.20	\$ 3,382,439.34	62	\$ 842,853.30	\$ 17,763.30
	930	22021	\$ 4,213,498.14	\$ 638,609.00	\$ 4,852,107.14	\$ 3,396,475.00	62	\$ 846,350.77	\$ 17,837.01
	1002	89024	\$ 17,033,852.16	\$ 2,581,696.00	\$ 19,615,548.16	\$ 13,730,883.71	251	\$ 3,421,530.86	\$ 72,109.44
	1152	6448	\$ 1,233,760.32	\$ 186,992.00	\$ 1,420,752.32	\$ 994,526.62	18	\$ 247,821.16	\$ 5,222.88
	1159	6448	\$ 1,233,760.32	\$ 186,992.00	\$ 1,420,752.32	\$ 994,526.62	18	\$ 247,821.16	\$ 5,222.88
	1160	6448	\$ 1,233,760.32	\$ 186,992.00	\$ 1,420,752.32	\$ 994,526.62	18	\$ 247,821.16	\$ 5,222.88
	1350	270889	\$ 51,831,901.26	\$ 7,855,781.00	\$ 59,687,682.26	\$ 41,781,377.58	763	\$ 10,411,294.41	\$ 219,420.09
	1380	112892	\$ 21,600,755.28	\$ 3,273,868.00	\$ 24,874,623.28	\$ 17,412,236.30	318	\$ 4,338,868.87	\$ 91,442.52
	1382	29948	\$ 5,730,250.32	\$ 868,492.00	\$ 6,598,742.32	\$ 4,619,119.62	84	\$ 1,151,015.53	\$ 24,257.88
	1469	329191	\$ 62,987,405.94	\$ 9,546,539.00	\$ 72,533,944.94	\$ 50,773,761.46	927	\$ 12,652,061.98	\$ 266,644.71
	1475	329191	\$ 62,987,405.94	\$ 9,546,539.00	\$ 72,533,944.94	\$ 50,773,761.46	927	\$ 12,652,061.98	\$ 266,644.71
	1479	329191	\$ 62,987,405.94	\$ 9,546,539.00	\$ 72,533,944.94	\$ 50,773,761.46	927	\$ 12,652,061.98	\$ 266,644.71
	2791	125124	\$ 23,941,226.16	\$ 3,628,596.00	\$ 27,569,822.16	\$ 19,298,875.51	352	\$ 4,808,991.14	\$ 101,350.44
	3312	190808	\$ 36,509,202.72	\$ 5,533,432.00	\$ 42,042,634.72	\$ 29,429,844.30	537	\$ 7,333,477.05	\$ 154,554.48
	3314	329191	\$ 62,987,405.94	\$ 9,546,539.00	\$ 72,533,944.94	\$ 50,773,761.46	927	\$ 12,652,061.98	\$ 266,644.71
	3631	81694	\$ 15,631,329.96	\$ 2,369,126.00	\$ 18,000,455.96	\$ 12,600,319.17	230	\$ 3,139,811.09	\$ 66,172.14
	3635	38536	\$ 7,373,478.24	\$ 1,117,544.00	\$ 8,491,022.24	\$ 5,943,715.57	109	\$ 1,481,085.03	\$ 31,214.16
	3820	216873	\$ 41,496,479.82	\$ 6,289,317.00	\$ 47,785,796.82	\$ 33,450,057.77	611	\$ 8,335,254.12	\$ 175,667.13
	5401	20279	\$ 3,880,183.86	\$ 588,091.00	\$ 4,468,274.86	\$ 3,127,792.40	57	\$ 779,399.09	\$ 16,425.99
	5413	39362	\$ 7,531,525.08	\$ 1,141,498.00	\$ 8,673,023.08	\$ 6,071,116.16	111	\$ 1,512,831.35	\$ 31,883.22
Goodfellow	238	20715	\$ 3,963,608.10	\$ 600,735.00	\$ 4,564,343.10	\$ 3,195,040.17	58	\$ 588,189.30	\$ 16,779.15
	239	20706	\$ 3,961,886.04	\$ 600,474.00	\$ 4,562,360.04	\$ 3,193,652.03	58	\$ 587,933.75	\$ 16,771.86
	240	20715	\$ 3,963,608.10	\$ 600,735.00	\$ 4,564,343.10	\$ 3,195,040.17	58	\$ 588,189.30	\$ 16,779.15
	241	22072	\$ 4,223,256.48	\$ 640,088.00	\$ 4,863,344.48	\$ 3,404,341.14	62	\$ 626,720.45	\$ 17,878.32
	242	22073	\$ 4,223,447.82	\$ 640,117.00	\$ 4,863,564.82	\$ 3,404,495.37	62	\$ 626,748.85	\$ 17,879.13
	243	10747	\$ 2,056,330.98	\$ 311,663.00	\$ 2,367,993.98	\$ 1,657,595.79	30	\$ 305,154.25	\$ 8,705.07
	250	22799	\$ 4,362,360.66	\$ 661,171.00	\$ 5,023,531.66	\$ 3,516,472.16	64	\$ 647,363.15	\$ 18,467.19
	255	25096	\$ 4,801,868.64	\$ 727,784.00	\$ 5,529,652.64	\$ 3,870,756.85	71	\$ 712,585.01	\$ 20,327.76
	257	22801	\$ 4,362,743.34	\$ 661,229.00	\$ 5,023,972.34	\$ 3,516,780.64	64	\$ 647,419.94	\$ 18,468.81
	356	27705	\$ 5,301,074.70	\$ 803,445.00	\$ 6,104,519.70	\$ 4,273,163.79	78	\$ 786,665.92	\$ 22,441.05
	700	67936	\$ 12,998,874.24	\$ 1,970,144.00	\$ 14,969,018.24	\$ 10,478,312.77	191	\$ 1,928,999.66	\$ 55,028.16
	3139	116514	\$ 22,293,788.76	\$ 3,378,906.00	\$ 25,672,694.76	\$ 17,970,886.33	328	\$ 3,308,341.18	\$ 94,376.34
	3206	81082	\$ 15,514,229.88	\$ 2,351,378.00	\$ 17,865,607.88	\$ 12,505,925.52	228	\$ 2,302,272.00	\$ 65,676.42
	3210	16298	\$ 3,118,459.32	\$ 472,642.00	\$ 3,591,101.32	\$ 2,513,770.92	46	\$ 462,771.38	\$ 13,201.38
	3227	50415	\$ 9,646,406.10	\$ 1,462,035.00	\$ 11,108,441.10	\$ 7,775,908.77	142	\$ 1,431,501.97	\$ 40,836.15
	3307	50082	\$ 9,582,689.88	\$ 1,452,378.00	\$ 11,035,067.88	\$ 7,724,547.52	141	\$ 1,422,046.65	\$ 40,566.42
	3311	91909	\$ 17,585,868.06	\$ 2,665,361.00	\$ 20,251,229.06	\$ 14,175,860.34	259	\$ 2,609,697.80	\$ 74,446.29

Keesler	2002	41119	\$ 7,867,709.46	\$ 1,192,451.00	\$ 9,060,160.46	\$ 6,342,112.32	116	\$ 1,526,151.95	\$ 33,306.39
	2003	41115	\$ 7,866,944.10	\$ 1,192,335.00	\$ 9,059,279.10	\$ 6,341,495.37	116	\$ 1,526,003.49	\$ 33,303.15
	2004	41119	\$ 7,867,709.46	\$ 1,192,451.00	\$ 9,060,160.46	\$ 6,342,112.32	116	\$ 1,526,151.95	\$ 33,306.39
	2503	31733	\$ 6,071,792.22	\$ 920,257.00	\$ 6,992,049.22	\$ 4,894,434.45	89	\$ 1,177,785.94	\$ 25,703.73
	2504	31733	\$ 6,071,792.22	\$ 920,257.00	\$ 6,992,049.22	\$ 4,894,434.45	89	\$ 1,177,785.94	\$ 25,703.73
	3821	50856	\$ 9,730,787.04	\$ 1,474,824.00	\$ 11,205,611.04	\$ 7,843,927.73	143	\$ 1,887,545.51	\$ 41,193.36
	4904	39742	\$ 7,604,234.28	\$ 1,152,518.00	\$ 8,756,752.28	\$ 6,129,726.60	112	\$ 1,475,043.92	\$ 32,191.02
	4908	47502	\$ 9,089,032.68	\$ 1,377,558.00	\$ 10,466,590.68	\$ 7,326,613.48	134	\$ 1,763,060.15	\$ 38,476.62
	5020	39841	\$ 7,623,176.94	\$ 1,155,389.00	\$ 8,778,565.94	\$ 6,144,996.16	112	\$ 1,478,718.35	\$ 32,271.21
	5022	47411	\$ 9,071,620.74	\$ 1,374,919.00	\$ 10,446,539.74	\$ 7,312,577.82	134	\$ 1,759,682.64	\$ 38,402.91
	6950	142122	\$ 27,193,623.48	\$ 4,121,538.00	\$ 31,315,161.48	\$ 21,920,613.04	400	\$ 5,274,928.09	\$115,118.82
	6955	142122	\$ 27,193,623.48	\$ 4,121,538.00	\$ 31,315,161.48	\$ 21,920,613.04	400	\$ 5,274,928.09	\$115,118.82
	6965	142122	\$ 27,193,623.48	\$ 4,121,538.00	\$ 31,315,161.48	\$ 21,920,613.04	400	\$ 5,274,928.09	\$115,118.82
	7315	142122	\$ 27,193,623.48	\$ 4,121,538.00	\$ 31,315,161.48	\$ 21,920,613.04	400	\$ 5,274,928.09	\$115,118.82
	7320	142122	\$ 27,193,623.48	\$ 4,121,538.00	\$ 31,315,161.48	\$ 21,920,613.04	400	\$ 5,274,928.09	\$115,118.82
	7404	142122	\$ 27,193,623.48	\$ 4,121,538.00	\$ 31,315,161.48	\$ 21,920,613.04	400	\$ 5,274,928.09	\$115,118.82
	7420	155264	\$ 29,708,213.76	\$ 4,502,656.00	\$ 34,210,869.76	\$ 23,947,608.83	437	\$ 5,762,699.90	\$125,763.84
Lackland	1209	24522	\$ 4,692,039.48	\$ 711,138.00	\$ 5,403,177.48	\$ 3,782,224.24	69	\$ 942,473.71	\$ 19,862.82
	1212	36960	\$ 7,071,926.40	\$ 1,071,840.00	\$ 8,143,766.40	\$ 5,700,636.48	104	\$ 1,420,513.35	\$ 29,937.60
	1215	36935	\$ 7,067,142.90	\$ 1,071,115.00	\$ 8,138,257.90	\$ 5,696,780.53	104	\$ 1,419,552.51	\$ 29,917.35
	1217	36935	\$ 7,067,142.90	\$ 1,071,115.00	\$ 8,138,257.90	\$ 5,696,780.53	104	\$ 1,419,552.51	\$ 29,917.35
	1219	36935	\$ 7,067,142.90	\$ 1,071,115.00	\$ 8,138,257.90	\$ 5,696,780.53	104	\$ 1,419,552.51	\$ 29,917.35
	1400	28831	\$ 5,516,523.54	\$ 836,099.00	\$ 6,352,622.54	\$ 4,446,835.78	81	\$ 1,108,084.97	\$ 23,353.11
	1405	28831	\$ 5,516,523.54	\$ 836,099.00	\$ 6,352,622.54	\$ 4,446,835.78	81	\$ 1,108,084.97	\$ 23,353.11
	1410	28831	\$ 5,516,523.54	\$ 836,099.00	\$ 6,352,622.54	\$ 4,446,835.78	81	\$ 1,108,084.97	\$ 23,353.11
	5570	179549	\$ 34,354,905.66	\$ 5,206,921.00	\$ 39,561,826.66	\$ 27,693,278.66	506	\$ 6,900,750.86	\$145,434.69
	7065	210190	\$ 40,217,754.60	\$ 6,095,510.00	\$ 46,313,264.60	\$ 32,419,285.22	592	\$ 8,078,401.01	\$170,253.90
	7357	13839	\$ 2,647,954.26	\$ 401,331.00	\$ 3,049,285.26	\$ 2,134,499.68	39	\$ 531,885.40	\$ 11,209.59
	7358	13839	\$ 2,647,954.26	\$ 401,331.00	\$ 3,049,285.26	\$ 2,134,499.68	39	\$ 531,885.40	\$ 11,209.59
	7435	57558	\$ 11,013,147.72	\$ 1,669,182.00	\$ 12,682,329.72	\$ 8,877,630.80	162	\$ 2,212,172.82	\$ 46,621.98
	7436	57558	\$ 11,013,147.72	\$ 1,669,182.00	\$ 12,682,329.72	\$ 8,877,630.80	162	\$ 2,212,172.82	\$ 46,621.98
	7448	12930	\$ 2,474,026.20	\$ 374,970.00	\$ 2,848,996.20	\$ 1,994,297.34	36	\$ 496,949.07	\$ 10,473.30
	7460	67100	\$ 12,838,914.00	\$ 1,945,900.00	\$ 14,784,814.00	\$ 10,349,369.80	189	\$ 2,578,908.17	\$ 54,351.00
	9085	184911	\$ 35,380,870.74	\$ 5,362,419.00	\$ 40,743,289.74	\$ 28,520,302.82	521	\$ 7,106,832.91	\$149,777.91
	9110	215824	\$ 41,295,764.16	\$ 6,258,896.00	\$ 47,554,660.16	\$ 33,288,262.11	608	\$ 8,294,937.06	\$174,817.44
	9210	215824	\$ 41,295,764.16	\$ 6,258,896.00	\$ 47,554,660.16	\$ 33,288,262.11	608	\$ 8,294,937.06	\$174,817.44
	9310	215824	\$ 41,295,764.16	\$ 6,258,896.00	\$ 47,554,660.16	\$ 33,288,262.11	608	\$ 8,294,937.06	\$174,817.44
	9410	186024	\$ 35,593,832.16	\$ 5,394,696.00	\$ 40,988,528.16	\$ 28,691,969.71	524	\$ 7,149,609.74	\$150,679.44
	10050	32778	\$ 6,271,742.52	\$ 950,562.00	\$ 7,222,304.52	\$ 5,055,613.16	92	\$ 1,259,783.19	\$ 26,550.18
	10070	32778	\$ 6,271,742.52	\$ 950,562.00	\$ 7,222,304.52	\$ 5,055,613.16	92	\$ 1,259,783.19	\$ 26,550.18
	10075	32778	\$ 6,271,742.52	\$ 950,562.00	\$ 7,222,304.52	\$ 5,055,613.16	92	\$ 1,259,783.19	\$ 26,550.18
	10201	40523	\$ 7,753,670.82	\$ 1,175,167.00	\$ 8,928,837.82	\$ 6,250,186.47	114	\$ 1,557,452.99	\$ 32,823.63
	10205	25451	\$ 4,869,794.34	\$ 738,079.00	\$ 5,607,873.34	\$ 3,925,511.34	72	\$ 978,178.72	\$ 20,615.31
	10207	119134	\$ 22,795,099.56	\$ 3,454,886.00	\$ 26,249,985.56	\$ 18,374,989.89	336	\$ 4,578,772.66	\$ 96,498.54
	10251	47705	\$ 9,127,874.70	\$ 1,383,445.00	\$ 10,511,319.70	\$ 7,357,923.79	134	\$ 1,833,484.56	\$ 38,641.05
	10255	47705	\$ 9,127,874.70	\$ 1,383,445.00	\$ 10,511,319.70	\$ 7,357,923.79	134	\$ 1,833,484.56	\$ 38,641.05
	10261	43806	\$ 8,381,840.04	\$ 1,270,374.00	\$ 9,652,214.04	\$ 6,756,549.83	123	\$ 1,683,631.17	\$ 35,482.86
	10265	43806	\$ 8,381,840.04	\$ 1,270,374.00	\$ 9,652,214.04	\$ 6,756,549.83	123	\$ 1,683,631.17	\$ 35,482.86
	10380	24921	\$ 4,768,384.14	\$ 722,709.00	\$ 5,491,093.14	\$ 3,843,765.20	70	\$ 957,808.80	\$ 20,186.01
	10385	27384	\$ 5,239,654.56	\$ 794,136.00	\$ 6,033,790.56	\$ 4,223,653.39	77	\$ 1,052,471.26	\$ 22,181.04
	10395	20460	\$ 3,914,816.40	\$ 593,340.00	\$ 4,508,156.40	\$ 3,155,709.48	58	\$ 786,355.61	\$ 16,572.60
	10416	215824	\$ 41,295,764.16	\$ 6,258,896.00	\$ 47,554,660.16	\$ 33,288,262.11	608	\$ 8,294,937.06	\$174,817.44
	10504	165841	\$ 31,732,016.94	\$ 4,809,389.00	\$ 36,541,405.94	\$ 25,578,984.16	467	\$ 6,373,900.29	\$134,331.21
	10534	45060	\$ 8,621,780.40	\$ 1,306,740.00	\$ 9,928,520.40	\$ 6,949,964.28	127	\$ 1,731,827.15	\$ 36,498.60
	10540	19170	\$ 3,667,987.80	\$ 555,930.00	\$ 4,223,917.80	\$ 2,956,742.46	54	\$ 736,776.00	\$ 15,527.70
	10547	35433	\$ 6,779,750.22	\$ 1,027,557.00	\$ 7,807,307.22	\$ 5,465,115.05	100	\$ 1,361,824.94	\$ 28,700.73
	10650	28669	\$ 5,485,526.46	\$ 831,401.00	\$ 6,316,927.46	\$ 4,421,849.22	81	\$ 1,101,858.69	\$ 23,221.89
	10652	28727	\$ 5,496,624.18	\$ 833,083.00	\$ 6,329,707.18	\$ 4,430,795.03	81	\$ 1,104,087.85	\$ 23,268.87
	10656	28669	\$ 5,485,526.46	\$ 831,401.00	\$ 6,316,927.46	\$ 4,421,849.22	81	\$ 1,101,858.69	\$ 23,221.89
	10802	28669	\$ 5,485,526.46	\$ 831,401.00	\$ 6,316,927.46	\$ 4,421,849.22	81	\$ 1,101,858.69	\$ 23,221.89
	10804	28669	\$ 5,485,526.46	\$ 831,401.00	\$ 6,316,927.46	\$ 4,421,849.22	81	\$ 1,101,858.69	\$ 23,221.89
	10806	28669	\$ 5,485,526.46	\$ 831,401.00	\$ 6,316,927.46	\$ 4,421,849.22	81	\$ 1,101,858.69	\$ 23,221.89
Laughlin	255	27648	\$ 5,290,168.32	\$ 801,792.00	\$ 6,091,960.32	\$ 4,264,372.22	78	\$ 644,860.39	\$ 22,394.88
	256	27648	\$ 5,290,168.32	\$ 801,792.00	\$ 6,091,960.32	\$ 4,264,372.22	78	\$ 644,860.39	\$ 22,394.88

Luke	133	23539	\$ 4,503,952.26	\$ 682,631.00	\$ 5,186,583.26	\$ 3,630,608.28	66	\$ 895,145.07	\$ 19,066.59
	528	34979	\$ 6,692,881.86	\$ 1,014,391.00	\$ 7,707,272.86	\$ 5,395,091.00	99	\$ 1,330,187.32	\$ 28,332.99
	530	34226	\$ 6,548,802.84	\$ 992,554.00	\$ 7,541,356.84	\$ 5,278,949.79	96	\$ 1,301,552.11	\$ 27,723.06
	542	29677	\$ 5,678,397.18	\$ 860,633.00	\$ 6,539,030.18	\$ 4,577,321.13	84	\$ 1,128,561.97	\$ 24,038.37
	546	42987	\$ 8,225,132.58	\$ 1,246,623.00	\$ 9,471,755.58	\$ 6,630,228.91	121	\$ 1,634,716.90	\$ 34,819.47
	634	22409	\$ 4,287,738.06	\$ 649,861.00	\$ 4,937,599.06	\$ 3,456,319.34	63	\$ 852,173.24	\$ 18,151.29
	635	24113	\$ 4,613,781.42	\$ 699,277.00	\$ 5,313,058.42	\$ 3,719,140.89	68	\$ 916,973.24	\$ 19,531.53
	636	23426	\$ 4,482,330.84	\$ 679,354.00	\$ 5,161,684.84	\$ 3,613,179.39	66	\$ 890,847.89	\$ 18,975.06
	637	23423	\$ 4,481,756.82	\$ 679,267.00	\$ 5,161,023.82	\$ 3,612,716.67	66	\$ 890,733.80	\$ 18,972.63
	640	35852	\$ 6,859,921.68	\$ 1,039,708.00	\$ 7,899,629.68	\$ 5,529,740.78	101	\$ 1,363,385.92	\$ 29,040.12
Maxwell	696	29750	\$ 5,692,365.00	\$ 862,750.00	\$ 6,555,115.00	\$ 4,588,580.50	84	\$ 989,543.66	\$ 24,097.50
	697	29750	\$ 5,692,365.00	\$ 862,750.00	\$ 6,555,115.00	\$ 4,588,580.50	84	\$ 989,543.66	\$ 24,097.50
	1016	33645	\$ 6,437,634.30	\$ 975,705.00	\$ 7,413,339.30	\$ 5,189,337.51	95	\$ 1,119,099.04	\$ 27,252.45
	1017	122133	\$ 23,368,928.22	\$ 3,541,857.00	\$ 26,910,785.22	\$ 18,837,549.65	344	\$ 4,062,384.41	\$ 98,927.73
	1410	31089	\$ 5,948,569.26	\$ 901,581.00	\$ 6,850,150.26	\$ 4,795,105.18	88	\$ 1,034,081.44	\$ 25,182.09
	1411	31089	\$ 5,948,569.26	\$ 901,581.00	\$ 6,850,150.26	\$ 4,795,105.18	88	\$ 1,034,081.44	\$ 25,182.09
Randolph	393	57062	\$ 10,918,243.08	\$ 1,654,798.00	\$ 12,573,041.08	\$ 8,801,128.76	161	\$ 2,193,109.66	\$ 46,220.22
	394	50719	\$ 9,704,573.46	\$ 1,470,851.00	\$ 11,175,424.46	\$ 7,822,797.12	143	\$ 1,949,324.05	\$ 41,082.39
	861	33823	\$ 6,471,692.82	\$ 980,867.00	\$ 7,452,559.82	\$ 5,216,791.87	95	\$ 1,299,946.51	\$ 27,396.63
	862	45852	\$ 8,773,321.68	\$ 1,329,708.00	\$ 10,103,029.68	\$ 7,072,120.78	129	\$ 1,762,266.73	\$ 37,140.12
Sheppard	527	36615	\$ 7,005,914.10	\$ 1,061,835.00	\$ 8,067,749.10	\$ 5,647,424.37	103	\$ 976,537.52	\$ 29,658.15
	528	24161	\$ 4,622,965.74	\$ 700,669.00	\$ 5,323,634.74	\$ 3,726,544.32	68	\$ 644,384.08	\$ 19,570.41
	596	194985	\$ 37,308,429.90	\$ 5,654,565.00	\$ 42,962,994.90	\$ 30,074,096.43	549	\$ 5,200,332.34	\$ 157,937.85
	602	160808	\$ 30,769,002.72	\$ 4,663,432.00	\$ 35,432,434.72	\$ 24,802,704.30	453	\$ 4,288,817.31	\$ 130,254.48
	622	160985	\$ 30,802,869.90	\$ 4,668,565.00	\$ 35,471,434.90	\$ 24,830,004.43	453	\$ 4,293,537.97	\$ 130,397.85
	632	58464	\$ 11,186,501.76	\$ 1,695,456.00	\$ 12,881,957.76	\$ 9,017,370.43	165	\$ 1,559,259.58	\$ 47,355.84
	633	58502	\$ 11,193,772.68	\$ 1,696,558.00	\$ 12,890,330.68	\$ 9,023,231.48	165	\$ 1,560,273.06	\$ 47,386.62
	691	36097	\$ 6,906,799.98	\$ 1,046,813.00	\$ 7,953,612.98	\$ 5,567,529.09	102	\$ 962,722.24	\$ 29,238.57
	693	35879	\$ 6,865,087.86	\$ 1,040,491.00	\$ 7,905,578.86	\$ 5,533,905.20	101	\$ 956,908.09	\$ 29,061.99
	776	194481	\$ 37,211,994.54	\$ 5,639,949.00	\$ 42,851,943.54	\$ 29,996,360.48	548	\$ 5,186,890.45	\$ 157,529.61
	791	36102	\$ 6,907,756.68	\$ 1,046,958.00	\$ 7,954,714.68	\$ 5,568,300.28	102	\$ 962,855.59	\$ 29,242.62
	792	19530	\$ 3,736,870.20	\$ 566,370.00	\$ 4,303,240.20	\$ 3,012,268.14	55	\$ 520,873.35	\$ 15,819.30
	793	27205	\$ 5,205,404.70	\$ 788,945.00	\$ 5,994,349.70	\$ 4,196,044.79	77	\$ 725,568.85	\$ 22,036.05
	862	161110	\$ 30,826,787.40	\$ 4,672,190.00	\$ 35,498,977.40	\$ 24,849,284.18	454	\$ 4,296,871.77	\$ 130,499.10
	882	161110	\$ 30,826,787.40	\$ 4,672,190.00	\$ 35,498,977.40	\$ 24,849,284.18	454	\$ 4,296,871.77	\$ 130,499.10
	1601	69799	\$ 13,355,340.66	\$ 2,024,171.00	\$ 15,379,511.66	\$ 10,765,658.16	197	\$ 1,861,568.82	\$ 56,537.19
	1602	69874	\$ 13,369,691.16	\$ 2,026,346.00	\$ 15,396,037.16	\$ 10,777,226.01	197	\$ 1,863,569.10	\$ 56,597.94
	1603	70597	\$ 13,508,029.98	\$ 2,047,313.00	\$ 15,555,342.98	\$ 10,888,740.09	199	\$ 1,882,851.82	\$ 57,183.57
	1604	70598	\$ 13,508,221.32	\$ 2,047,342.00	\$ 15,555,563.32	\$ 10,888,894.32	199	\$ 1,882,878.49	\$ 57,184.38
	1660	58739	\$ 11,239,120.26	\$ 1,703,431.00	\$ 12,942,551.26	\$ 9,059,785.88	165	\$ 1,566,593.95	\$ 47,578.59
	1661	54955	\$ 10,515,089.70	\$ 1,593,695.00	\$ 12,108,784.70	\$ 8,476,149.29	155	\$ 1,465,673.07	\$ 44,513.55
	1670	54574	\$ 10,442,189.16	\$ 1,582,646.00	\$ 12,024,835.16	\$ 8,417,384.61	154	\$ 1,455,511.64	\$ 44,204.94
Vance	421	25666	\$ 4,910,932.44	\$ 744,314.00	\$ 5,655,246.44	\$ 3,958,672.51	72	\$ 640,276.33	\$ 20,789.46
	423	25726	\$ 4,922,412.84	\$ 746,054.00	\$ 5,668,466.84	\$ 3,967,926.79	72	\$ 641,773.12	\$ 20,838.06

Location	BAH Rates	Per Year	CF	BAH
Altus	639	7668	0.92	O&M
Columbus	651	7812	0.81	Utilities
Ft Sam	1137	13644	0.86	Full Reno #1
Goodfellow	840	10080	0.9	Full Reno #2
Keesler	1098	13176	0.88	Moves
Lackland	1137	13644	0.86	Scoring
Laughlin	690	8280	0.91	PM
Luke	1125	13500	0.97	
Maxwell	984	11808	0.84	
Randolph	1137	13644	0.86	
Sheppard	789	9468	0.92	
Vance	738	8856	0.92	
	To Calculate Personnel to get BAH			
	UFC states 355 GSF/Person E1-E6			

Manpower Data

			Table A4.5. Manpower Matrix.						
			TOTAL ROOMS						
Base	Rooms		UNACCOMPANIED HOUSING MANAGERS						
Altus	374		REQUIRED GRADE DISTRIBUTION 1						
Columbus	165		1 – 49						
Ft Sam	8200		50 – 145	MSGT					
Goodfellow	1943		146 – 290	1-MSGT, 1-SSGT					
Keesler	4000		291 – 435	1-MSGT, 2-SSGT					
Lackland	8683		436 – 580	1-MSGT, 3-SSGT					
Laughlin	156		581 – 725	1-MSGT, 4-SSGT					
Luke	830		726 – 870	1-MSGT, 1-TSGT, 4-SSGT					
Maxwell	782		871 – 1015	1-MSGT, 2-TSGT, 4-SSGT					
Randolph	528		1016 – 1160	1-MSGT, 2-TSGT, 5-SSGT					
Sheppard	5113		1 NOTE: Civilian equivalents may be used in lieu of military positions.						
Vance	145								
			Housing Officer						
			Housing Clerk						

BAH Status Quo

Discounted Total BAH Cost (\$Q)													
Year	Altus	Columbus	Ft Sam	Goodfellow	Keesler	Lackland	Laughlin	Luke	Maxwell	Randolph	Sheppard	Vance	
1	\$ 140,615.11	\$ 63,160.03	\$ 5,491,217.32	\$ 961,155.66	\$ 2,587,128.57	\$ 5,814,639.01	\$ 63,302.24	\$ 549,929.75	\$ 452,965.86	\$ 353,619.39	\$ 2,376,132.00	\$ 62,925.71	
2	\$ 138,033.77	\$ 62,000.57	\$ 5,390,412.36	\$ 943,511.26	\$ 2,539,635.39	\$ 5,707,896.84	\$ 62,140.17	\$ 539,834.43	\$ 444,650.55	\$ 347,127.82	\$ 2,332,512.19	\$ 61,770.55	
3	\$ 135,699.86	\$ 60,952.25	\$ 5,299,270.12	\$ 927,558.17	\$ 2,496,694.70	\$ 5,611,386.51	\$ 61,089.49	\$ 530,706.79	\$ 437,132.30	\$ 341,258.51	\$ 2,293,073.58	\$ 60,726.12	
4	\$ 133,765.98	\$ 60,083.61	\$ 5,223,749.12	\$ 914,339.34	\$ 2,461,113.78	\$ 5,531,417.47	\$ 60,218.89	\$ 523,143.58	\$ 430,902.64	\$ 336,395.17	\$ 2,260,394.51	\$ 59,860.70	
5	\$ 131,956.58	\$ 59,270.88	\$ 5,153,089.71	\$ 901,971.47	\$ 2,427,823.35	\$ 5,456,596.37	\$ 59,404.33	\$ 516,067.24	\$ 425,074.01	\$ 331,844.89	\$ 2,229,819.13	\$ 59,050.99	
6	\$ 130,171.66	\$ 58,469.15	\$ 5,083,386.09	\$ 889,770.89	\$ 2,394,983.23	\$ 5,382,787.33	\$ 58,600.80	\$ 509,086.62	\$ 419,324.21	\$ 327,356.17	\$ 2,199,657.32	\$ 58,252.24	
7	\$ 128,410.88	\$ 57,678.26	\$ 5,014,625.31	\$ 877,735.34	\$ 2,362,587.32	\$ 5,309,976.68	\$ 57,808.13	\$ 502,200.42	\$ 413,652.19	\$ 322,928.16	\$ 2,169,903.50	\$ 57,464.28	
8	\$ 126,673.93	\$ 56,898.08	\$ 4,946,794.63	\$ 865,862.59	\$ 2,330,629.62	\$ 5,238,150.91	\$ 57,026.18	\$ 495,407.37	\$ 408,056.90	\$ 318,560.05	\$ 2,140,552.15	\$ 56,686.99	
9	\$ 124,960.46	\$ 56,128.44	\$ 4,879,881.46	\$ 854,150.44	\$ 2,299,104.19	\$ 5,167,296.70	\$ 56,254.82	\$ 488,706.21	\$ 402,537.29	\$ 314,251.03	\$ 2,111,597.82	\$ 55,920.21	
10	\$ 123,270.18	\$ 55,369.21	\$ 4,813,873.40	\$ 842,596.72	\$ 2,268,005.20	\$ 5,097,400.90	\$ 55,493.88	\$ 482,095.69	\$ 397,092.34	\$ 310,000.29	\$ 2,083,035.15	\$ 55,163.80	
11	\$ 121,602.75	\$ 54,620.26	\$ 4,748,758.21	\$ 831,199.27	\$ 2,237,326.87	\$ 5,028,450.55	\$ 54,743.24	\$ 475,574.59	\$ 391,721.04	\$ 305,807.05	\$ 2,054,858.82	\$ 54,417.62	
12	\$ 119,957.88	\$ 53,881.43	\$ 4,684,523.80	\$ 819,956.00	\$ 2,207,063.51	\$ 4,960,432.86	\$ 54,002.75	\$ 469,141.70	\$ 386,422.40	\$ 301,670.53	\$ 2,027,063.63	\$ 53,681.54	
13	\$ 118,335.27	\$ 53,152.60	\$ 4,621,158.26	\$ 808,864.80	\$ 2,177,209.51	\$ 4,893,335.22	\$ 53,272.28	\$ 462,795.82	\$ 381,195.43	\$ 297,589.96	\$ 1,999,644.41	\$ 52,955.41	
14	\$ 116,734.60	\$ 52,433.63	\$ 4,558,649.84	\$ 797,923.64	\$ 2,147,759.33	\$ 4,827,145.17	\$ 52,551.69	\$ 456,535.78	\$ 376,039.16	\$ 293,564.59	\$ 1,972,596.08	\$ 52,239.11	
15	\$ 115,155.58	\$ 51,724.38	\$ 4,496,986.94	\$ 787,130.47	\$ 2,118,707.52	\$ 4,761,850.46	\$ 51,840.84	\$ 450,360.42	\$ 370,952.64	\$ 289,593.67	\$ 1,945,913.63	\$ 51,532.49	
16	\$ 113,597.92	\$ 51,024.73	\$ 4,436,158.13	\$ 776,483.29	\$ 2,090,048.67	\$ 4,697,438.95	\$ 51,139.61	\$ 444,268.59	\$ 365,934.93	\$ 285,676.46	\$ 1,919,592.09	\$ 50,835.43	
17	\$ 112,061.33	\$ 50,334.54	\$ 4,376,152.13	\$ 765,980.14	\$ 2,061,777.48	\$ 4,633,898.72	\$ 50,447.87	\$ 438,259.16	\$ 360,985.08	\$ 281,812.24	\$ 1,893,626.59	\$ 50,147.80	
18	\$ 110,545.52	\$ 49,653.69	\$ 4,316,957.80	\$ 755,619.05	\$ 2,033,888.70	\$ 4,571,217.96	\$ 49,765.48	\$ 432,331.01	\$ 356,102.19	\$ 278,000.28	\$ 1,868,012.32	\$ 49,469.48	
19	\$ 109,050.22	\$ 48,982.04	\$ 4,258,564.17	\$ 745,398.12	\$ 2,006,377.17	\$ 4,509,385.06	\$ 49,092.33	\$ 426,483.06	\$ 351,285.35	\$ 274,239.89	\$ 1,842,744.52	\$ 48,800.32	
20	\$ 107,575.14	\$ 48,319.48	\$ 4,200,960.40	\$ 735,315.44	\$ 1,979,237.77	\$ 4,448,388.55	\$ 48,428.28	\$ 420,714.20	\$ 346,533.66	\$ 270,530.37	\$ 1,817,818.51	\$ 48,140.22	
21	\$ 106,120.02	\$ 47,665.89	\$ 4,144,135.82	\$ 725,369.14	\$ 1,952,465.47	\$ 4,388,217.11	\$ 47,773.21	\$ 415,023.38	\$ 341,846.25	\$ 266,871.02	\$ 1,793,229.66	\$ 47,489.05	
22	\$ 104,684.58	\$ 47,021.13	\$ 4,088,079.87	\$ 715,557.39	\$ 1,926,055.31	\$ 4,328,859.58	\$ 47,127.00	\$ 409,409.54	\$ 337,222.25	\$ 263,261.17	\$ 1,768,973.41	\$ 46,846.69	
23	\$ 103,268.56	\$ 46,385.10	\$ 4,032,782.17	\$ 705,878.35	\$ 1,900,002.38	\$ 4,270,304.96	\$ 46,489.53	\$ 403,871.63	\$ 332,660.79	\$ 259,700.15	\$ 1,745,045.27	\$ 46,213.01	
24	\$ 101,871.69	\$ 45,757.66	\$ 3,978,232.46	\$ 696,330.24	\$ 1,874,301.87	\$ 4,212,542.38	\$ 45,860.69	\$ 398,408.64	\$ 328,161.03	\$ 256,187.30	\$ 1,721,440.79	\$ 45,587.91	
25	\$ 100,493.71	\$ 45,138.72	\$ 3,924,420.62	\$ 686,911.28	\$ 1,848,948.99	\$ 4,155,561.13	\$ 45,240.35	\$ 393,019.53	\$ 323,722.13	\$ 252,721.96	\$ 1,698,155.60	\$ 44,971.26	
26	\$ 99,134.38	\$ 44,528.15	\$ 3,871,336.67	\$ 677,619.72	\$ 1,823,939.06	\$ 4,099,350.64	\$ 44,628.41	\$ 387,703.33	\$ 319,343.28	\$ 249,303.50	\$ 1,675,185.38	\$ 44,362.95	
27	\$ 97,793.43	\$ 43,925.84	\$ 3,818,970.77	\$ 668,453.85	\$ 1,799,267.42	\$ 4,043,900.49	\$ 44,024.74	\$ 382,459.03	\$ 315,023.66	\$ 245,931.28	\$ 1,652,525.87	\$ 43,762.87	
28	\$ 96,470.62	\$ 43,331.67	\$ 3,767,313.19	\$ 659,411.96	\$ 1,774,929.50	\$ 3,989,200.39	\$ 43,429.23	\$ 377,285.67	\$ 310,762.47	\$ 242,604.67	\$ 1,630,172.86	\$ 43,170.91	
29	\$ 95,165.70	\$ 42,745.54	\$ 3,716,354.37	\$ 650,492.38	\$ 1,750,920.79	\$ 3,935,240.19	\$ 42,841.78	\$ 372,182.29	\$ 306,558.92	\$ 239,323.06	\$ 1,608,122.21	\$ 42,586.96	
30	\$ 93,878.44	\$ 42,167.34	\$ 3,666,084.84	\$ 641,693.45	\$ 1,727,236.84	\$ 3,882,009.89	\$ 42,262.28	\$ 367,147.94	\$ 302,412.23	\$ 236,085.84	\$ 1,586,369.84	\$ 42,010.90	
31	\$ 92,608.59	\$ 41,596.96	\$ 3,616,495.28	\$ 633,013.54	\$ 1,703,873.25	\$ 3,829,499.61	\$ 41,690.62	\$ 362,181.69	\$ 308,321.63	\$ 232,892.41	\$ 1,564,911.69	\$ 41,442.64	
32	\$ 91,355.91	\$ 41,034.30	\$ 3,567,576.51	\$ 624,451.04	\$ 1,680,825.69	\$ 3,777,699.61	\$ 41,126.69	\$ 357,282.61	\$ 294,286.36	\$ 229,742.18	\$ 1,543,743.81	\$ 40,882.06	
33	\$ 90,120.18	\$ 40,479.24	\$ 3,519,319.43	\$ 616,004.36	\$ 1,658,089.88	\$ 3,726,600.29	\$ 40,570.38	\$ 352,449.80	\$ 290,305.68	\$ 226,634.55	\$ 1,522,862.25	\$ 40,329.07	
34	\$ 88,901.16	\$ 39,931.70	\$ 3,471,715.11	\$ 607,671.93	\$ 1,635,661.61	\$ 3,676,192.17	\$ 40,021.61	\$ 347,682.37	\$ 286,378.84	\$ 223,568.96	\$ 1,502,263.14	\$ 39,783.55	
35	\$ 87,698.63	\$ 39,391.56	\$ 3,424,754.72	\$ 599,452.21	\$ 1,613,536.72	\$ 3,626,465.90	\$ 39,480.25	\$ 342,979.42	\$ 282,505.12	\$ 220,544.84	\$ 1,481,942.68	\$ 39,245.42	
36	\$ 86,512.37	\$ 38,858.73	\$ 3,378,429.53	\$ 591,343.68	\$ 1,591,711.10	\$ 3,577,412.26	\$ 38,946.22	\$ 338,340.08	\$ 278,683.79	\$ 217,561.63	\$ 1,461,897.08	\$ 38,714.56	
37	\$ 85,342.16	\$ 38,333.10	\$ 3,332,730.97	\$ 583,344.83	\$ 1,570,180.71	\$ 3,529,022.14	\$ 38,419.41	\$ 333,763.50	\$ 274,914.15	\$ 214,618.77	\$ 1,442,122.62	\$ 38,190.89	
38	\$ 84,187.77	\$ 37,814.59	\$ 3,287,660.55	\$ 575,454.18	\$ 1,548,941.55	\$ 3,481,286.57	\$ 37,899.73	\$ 329,248.83	\$ 271,195.51	\$ 211,715.71	\$ 1,422,615.65	\$ 37,674.30	
39	\$ 83,049.00	\$ 37,303.08	\$ 3,243,179.91	\$ 567,670.25	\$ 1,527,989.69	\$ 3,434,196.71	\$ 37,387.07	\$ 324,795.22	\$ 267,527.16	\$ 208,851.92	\$ 1,403,372.54	\$ 37,164.69	
40	\$ 81,925.63	\$ 36,798.50	\$ 3,199,310.81	\$ 559,991.62	\$ 1,507,321.23	\$ 3,387,743.81	\$ 36,881.35	\$ 320,401.85	\$ 263,908.44	\$ 206,026.87	\$ 1,384,389.72	\$ 36,661.98	
41	\$ 80,817.46	\$ 36,300.74	\$ 3,156,035.11	\$ 552,416.86	\$ 1,486,932.34	\$ 3,341,919.25	\$ 36,382.48	\$ 316,067.92	\$ 260,338.66	\$ 203,240.03	\$ 1,365,663.68	\$ 36,166.07	
42	\$ 79,724.27	\$ 35,809.72	\$ 3,113,344.78	\$ 544,944.55	\$ 1,466,819.25	\$ 3,296,714.55	\$ 35,890.35	\$ 311,792.60	\$ 256,817.17	\$ 200,490.89	\$ 1,347,190.93	\$ 35,676.87	
43	\$ 78,645.88	\$ 35,325.34	\$ 3,071,231.90	\$ 537,573.32	\$ 1,446,978.21	\$ 3,252,121.31	\$ 35,404.87	\$ 307,575.12	\$ 253,343.32	\$ 197,778.94	\$ 1,328,968.06	\$ 35,194.28	
44	\$ 77,582.07	\$ 34,847.51	\$ 3,029,688.67	\$ 530,301.80	\$ 1,427,405.56	\$ 3,208,131.26	\$ 34,925.97	\$ 303,414.68	\$ 249,916.45	\$ 195,103.67	\$ 1,310,991.68	\$ 34,718.22	
45	\$ 76,532.65	\$ 34,376.14	\$ 2,988,707.38	\$ 523,128.63	\$ 1,408,097.66	\$ 3,164,736.25	\$ 34,453.54	\$ 299,310.52	\$ 246,535.94	\$ 192,464.59	\$ 1,293,258.46	\$ 34,248.61	
46	\$ 75,497.42	\$ 33,911.15	\$ 2,948,280.42	\$ 516,052.50	\$ 1,389,050.93	\$ 3,121,928.22	\$ 33,987.50	\$ 295,261.88	\$ 243,201.15	\$ 189,861.20	\$ 1,275,765.11	\$ 33,785.34	
47	\$ 74,476.20	\$ 33,452.45	\$ 2,908,400.29	\$ 509,072.08	\$ 1,370,261.83	\$ 3,079,699.24	\$ 33,527.77	\$ 291,268.00	\$ 239,911.48	\$ 187,293.03	\$ 1,258,508.38	\$ 33,328.34	
48	\$ 73,468.80	\$ 32,999.95	\$ 2,869,059.61	\$ 502,186.08	\$ 1,351,726.89	\$ 3,038,041.47	\$ 33,074.25	\$ 287,328.14	\$ 236,666.30	\$ 184,759.60	\$ 1,241,485.08	\$ 32,877.52	
49	\$ 72,475.02	\$ 32,553.57	\$ 2,830,251.08	\$ 495,393.22	\$ 1,333,442.66	\$ 2,996,947.19	\$ 32,626.87	\$ 283,441.57	\$ 233,465.01	\$ 182,260.43	\$ 1,224,692.05	\$ 32,432.80	
50	\$ 71,494.68	\$ 32,113.23	\$ 2,791,967.49	\$ 488,692.25	\$ 1,315,405.76	\$ 2,956,408.78	\$ 32,185.54	\$ 279,607.58	\$ 230,307.03	\$ 179,795.08	\$ 1,208,126.16	\$ 31,994.10	
Total	\$ 5,089,471.57	\$ 2,286,035.87	\$ 198,751,009.55	\$ 34,788,398.80	\$ 93,639,422.03	\$ 210,457,045.56	\$ 2,291,182.98	\$ 19,904,346.79	\$ 16,394,802.41	\$ 12,799,021.77	\$ 86,002,539.60	\$ 2,277,554.87	
		AETC NPV =	\$ 684,680,831.80										

BAH Privatization

Discounted Total BAH (Privatization)													
Year	Altus	Columbus	Pt Sam	Goodfellow	Keesler	Lackland	Laughlin	Luke	Maxwell	Randolph	Sheppard	Vance	
1	\$ 2,811,693.17	\$ 1,262,927.07	\$ 109,800,565.45	\$ 19,218,950.72	\$ 51,731,367.36	\$ 116,267,598.63	\$ 1,265,770.61	\$ 10,996,213.49	\$ 9,057,355.63	\$ 7,070,856.30	\$ 47,512,349.75	\$ 1,258,241.72	
2	\$ 2,759,507.06	\$ 1,239,486.66	\$ 107,762,624.52	\$ 18,862,239.57	\$ 50,771,213.19	\$ 114,109,627.06	\$ 1,242,277.42	\$ 10,792,119.52	\$ 8,889,247.61	\$ 6,939,618.47	\$ 46,630,502.18	\$ 1,234,888.27	
3	\$ 2,712,315.49	\$ 1,218,289.64	\$ 105,919,727.47	\$ 18,539,667.94	\$ 49,902,951.86	\$ 112,158,187.06	\$ 1,221,032.68	\$ 10,607,558.63	\$ 8,737,228.59	\$ 6,820,940.94	\$ 45,833,053.01	\$ 1,213,769.89	
4	\$ 2,673,111.39	\$ 1,200,680.35	\$ 104,388,752.47	\$ 18,271,693.61	\$ 49,181,649.29	\$ 110,537,040.71	\$ 1,203,383.74	\$ 10,454,235.85	\$ 8,610,939.76	\$ 6,722,350.33	\$ 45,170,577.19	\$ 1,196,225.93	
5	\$ 2,634,473.96	\$ 1,183,325.59	\$ 102,879,906.35	\$ 18,007,592.61	\$ 48,470,772.51	\$ 108,939,326.57	\$ 1,185,989.90	\$ 10,303,129.22	\$ 8,486,476.32	\$ 6,625,184.77	\$ 44,517,676.86	\$ 1,178,935.55	
6	\$ 2,596,394.99	\$ 1,166,221.68	\$ 101,392,869.25	\$ 17,747,308.95	\$ 47,770,170.81	\$ 107,364,705.97	\$ 1,168,847.48	\$ 10,154,206.69	\$ 8,363,811.89	\$ 6,529,423.64	\$ 43,874,213.63	\$ 1,161,895.09	
7	\$ 2,558,866.42	\$ 1,149,364.99	\$ 99,927,325.94	\$ 17,490,787.46	\$ 47,079,695.68	\$ 105,812,845.10	\$ 1,151,952.83	\$ 10,007,436.71	\$ 8,242,920.46	\$ 6,435,046.66	\$ 43,240,051.09	\$ 1,145,100.94	
8	\$ 2,521,880.30	\$ 1,132,751.94	\$ 98,482,963.75	\$ 17,237,977.65	\$ 46,399,200.76	\$ 104,283,414.99	\$ 1,135,302.38	\$ 9,862,788.16	\$ 8,123,776.41	\$ 6,324,033.81	\$ 42,615,054.79	\$ 1,128,549.53	
9	\$ 2,485,428.77	\$ 1,116,379.03	\$ 97,059,482.49	\$ 16,988,814.25	\$ 45,728,541.78	\$ 102,776,091.43	\$ 1,118,892.60	\$ 9,720,230.37	\$ 8,006,354.49	\$ 6,250,365.38	\$ 41,999,092.26	\$ 1,112,237.35	
10	\$ 2,449,504.12	\$ 1,100,242.76	\$ 95,656,574.42	\$ 16,743,256.13	\$ 45,067,576.57	\$ 101,290,554.88	\$ 1,102,720.01	\$ 9,579,733.13	\$ 7,890,629.79	\$ 6,160,021.94	\$ 41,392,032.92	\$ 1,096,160.96	
11	\$ 2,414,098.72	\$ 1,084,339.74	\$ 94,273,944.13	\$ 16,501,247.32	\$ 44,416,165.03	\$ 99,826,490.43	\$ 1,086,781.18	\$ 9,441,266.65	\$ 7,776,577.79	\$ 6,070,984.32	\$ 40,793,748.07	\$ 1,080,316.93	
12	\$ 2,379,205.09	\$ 1,068,666.58	\$ 92,911,298.52	\$ 16,262,736.54	\$ 43,774,169.06	\$ 98,383,587.73	\$ 1,071,072.73	\$ 9,304,801.57	\$ 7,664,174.30	\$ 5,983,233.67	\$ 40,204,110.90	\$ 1,064,701.91	
13	\$ 2,344,815.80	\$ 1,053,219.96	\$ 91,568,348.73	\$ 16,027,673.22	\$ 43,141,452.57	\$ 96,961,540.90	\$ 1,055,591.33	\$ 9,170,308.98	\$ 7,553,395.51	\$ 5,896,751.38	\$ 39,622,996.41	\$ 1,049,312.60	
14	\$ 2,310,923.59	\$ 1,037,996.60	\$ 90,244,810.09	\$ 15,796,007.53	\$ 42,517,881.43	\$ 95,560,048.48	\$ 1,040,333.70	\$ 9,037,760.36	\$ 7,444,219.93	\$ 5,811,519.11	\$ 39,050,281.41	\$ 1,034,145.72	
15	\$ 2,277,521.25	\$ 1,022,993.29	\$ 88,940,402.01	\$ 15,567,690.35	\$ 41,903,323.45	\$ 94,178,813.38	\$ 1,025,296.61	\$ 8,907,127.61	\$ 7,336,618.42	\$ 5,727,518.79	\$ 38,485,844.49	\$ 1,019,198.07	
16	\$ 2,244,601.72	\$ 1,008,206.84	\$ 87,654,847.99	\$ 15,342,673.30	\$ 41,297,648.36	\$ 92,817,542.80	\$ 1,010,476.86	\$ 8,778,338.04	\$ 7,230,574.15	\$ 5,644,732.63	\$ 37,929,566.01	\$ 1,004,466.47	
17	\$ 2,212,158.00	\$ 993,634.11	\$ 86,387,875.50	\$ 15,120,908.67	\$ 40,700,727.76	\$ 91,475,948.18	\$ 995,871.32	\$ 8,651,499.36	\$ 7,126,062.67	\$ 5,563,143.06	\$ 37,381,323.03	\$ 989,947.81	
18	\$ 2,180,183.24	\$ 979,272.01	\$ 85,139,215.97	\$ 14,902,349.45	\$ 40,112,435.12	\$ 90,153,745.10	\$ 981,476.89	\$ 8,526,449.67	\$ 7,023,061.80	\$ 5,482,732.80	\$ 36,841,014.34	\$ 975,639.00	
19	\$ 2,148,670.64	\$ 965,117.51	\$ 83,908,604.69	\$ 14,686,949.31	\$ 39,532,645.72	\$ 88,850,653.29	\$ 967,290.52	\$ 8,403,207.46	\$ 6,921,549.72	\$ 5,403,484.80	\$ 36,308,510.40	\$ 961,537.01	
20	\$ 2,117,613.52	\$ 951,167.60	\$ 82,695,780.80	\$ 14,474,662.58	\$ 38,961,236.66	\$ 87,566,396.50	\$ 953,309.20	\$ 8,281,746.61	\$ 6,821,504.90	\$ 5,325,382.25	\$ 35,783,703.33	\$ 947,638.85	
21	\$ 2,087,005.31	\$ 937,419.32	\$ 81,500,487.20	\$ 14,265,444.27	\$ 38,398,086.80	\$ 86,300,702.50	\$ 939,529.97	\$ 8,162,041.36	\$ 6,722,906.15	\$ 5,248,408.61	\$ 35,266,481.88	\$ 933,941.58	
22	\$ 2,056,839.52	\$ 923,869.77	\$ 80,322,470.49	\$ 14,059,250.02	\$ 37,843,076.77	\$ 85,053,302.97	\$ 925,949.90	\$ 8,044,066.35	\$ 6,625,732.55	\$ 5,172,547.56	\$ 34,756,736.41	\$ 920,442.29	
23	\$ 2,027,109.74	\$ 910,516.05	\$ 79,161,480.97	\$ 13,856,036.13	\$ 37,296,088.92	\$ 83,823,933.49	\$ 912,566.12	\$ 7,927,796.56	\$ 6,529,963.50	\$ 5,097,783.00	\$ 34,254,358.84	\$ 907,138.12	
24	\$ 1,997,809.68	\$ 897,355.36	\$ 78,017,272.51	\$ 13,655,759.51	\$ 36,757,007.29	\$ 82,612,333.45	\$ 899,375.79	\$ 7,813,207.35	\$ 6,435,578.72	\$ 5,024,099.11	\$ 33,759,242.70	\$ 894,026.25	
25	\$ 1,968,933.13	\$ 884,384.89	\$ 76,889,602.57	\$ 13,458,377.71	\$ 36,225,717.60	\$ 81,418,246.00	\$ 886,376.12	\$ 7,700,274.42	\$ 6,342,558.18	\$ 4,951,480.24	\$ 33,271,283.02	\$ 881,103.90	
26	\$ 1,940,473.96	\$ 871,601.90	\$ 75,778,732.02	\$ 13,263,488.89	\$ 35,702,107.22	\$ 80,241,418.02	\$ 873,564.35	\$ 7,588,973.83	\$ 6,250,882.17	\$ 4,839,911.02	\$ 32,790,376.36	\$ 868,368.33	
27	\$ 1,912,426.14	\$ 859,003.67	\$ 74,682,925.45	\$ 13,072,131.81	\$ 35,186,065.17	\$ 79,081,600.04	\$ 860,937.75	\$ 7,479,282.00	\$ 6,160,531.25	\$ 4,809,376.27	\$ 32,316,420.77	\$ 855,816.84	
28	\$ 1,884,783.73	\$ 846,587.54	\$ 73,603,450.51	\$ 12,883,185.83	\$ 34,677,482.05	\$ 77,938,546.18	\$ 848,493.67	\$ 7,371,175.66	\$ 6,071,486.28	\$ 4,739,861.03	\$ 31,849,315.79	\$ 843,446.77	
29	\$ 1,857,540.87	\$ 834,350.87	\$ 72,539,578.41	\$ 12,696,970.89	\$ 34,176,250.04	\$ 76,812,014.15	\$ 836,229.45	\$ 7,264,631.90	\$ 5,983,728.37	\$ 4,671,350.58	\$ 31,388,962.40	\$ 831,255.50	
30	\$ 1,830,691.77	\$ 822,291.08	\$ 71,491,083.64	\$ 12,513,447.52	\$ 33,682,262.89	\$ 75,701,765.14	\$ 824,142.50	\$ 7,159,628.14	\$ 5,897,238.93	\$ 4,603,830.38	\$ 30,935,263.00	\$ 819,240.45	
31	\$ 1,804,230.76	\$ 810,405.59	\$ 70,457,743.92	\$ 12,332,576.82	\$ 33,195,415.88	\$ 74,607,563.78	\$ 812,230.26	\$ 7,056,142.12	\$ 5,811,999.61	\$ 4,537,286.13	\$ 30,488,121.42	\$ 807,399.06	
32	\$ 1,778,152.22	\$ 798,691.99	\$ 69,439,340.20	\$ 12,154,320.45	\$ 32,715,605.81	\$ 73,529,178.12	\$ 800,490.20	\$ 6,954,151.89	\$ 5,727,992.35	\$ 4,471,703.71	\$ 30,047,442.87	\$ 795,728.83	
33	\$ 1,752,450.61	\$ 787,147.53	\$ 68,435,660.60	\$ 11,978,640.65	\$ 32,242,730.97	\$ 72,466,357.57	\$ 788,919.83	\$ 6,853,635.84	\$ 5,645,199.34	\$ 4,407,069.23	\$ 29,613,133.94	\$ 784,222.88	
34	\$ 1,727,120.51	\$ 775,770.01	\$ 67,446,480.34	\$ 11,805,500.06	\$ 31,776,691.11	\$ 71,418,942.82	\$ 777,516.69	\$ 6,754,572.66	\$ 5,563,603.03	\$ 4,343,368.98	\$ 29,185,102.55	\$ 772,891.97	
35	\$ 1,702,156.52	\$ 764,556.95	\$ 66,471,601.75	\$ 11,634,862.11	\$ 31,317,387.43	\$ 70,386,645.83	\$ 766,278.39	\$ 6,656,941.35	\$ 5,483,186.12	\$ 4,280,589.47	\$ 28,763,257.98	\$ 761,720.51	
36	\$ 1,677,553.37	\$ 753,505.96	\$ 65,510,814.15	\$ 11,466,690.58	\$ 30,864,722.59	\$ 69,369,269.77	\$ 755,202.52	\$ 6,560,721.21	\$ 5,403,931.56	\$ 4,218,717.37	\$ 28,347,510.79	\$ 750,710.52	
37	\$ 1,653,305.84	\$ 742,614.71	\$ 64,563,913.88	\$ 11,300,949.81	\$ 30,418,600.61	\$ 68,366,598.97	\$ 744,286.74	\$ 6,465,891.85	\$ 5,325,822.56	\$ 4,157,739.58	\$ 27,937,772.86	\$ 739,859.67	
38	\$ 1,629,408.78	\$ 731,880.87	\$ 63,630,701.21	\$ 11,137,604.68	\$ 29,978,926.92	\$ 67,378,420.88	\$ 733,528.74	\$ 6,372,433.16	\$ 5,248,842.56	\$ 4,087,643.17	\$ 27,533,957.32	\$ 729,165.83	
39	\$ 1,605,857.13	\$ 721,302.19	\$ 62,710,975.30	\$ 10,976,620.56	\$ 29,545,608.36	\$ 66,404,526.02	\$ 722,926.24	\$ 6,280,325.33	\$ 5,172,975.23	\$ 4,038,415.40	\$ 27,135,978.58	\$ 718,626.22	
40	\$ 1,582,645.90	\$ 710,876.41	\$ 61,804,544.20	\$ 10,817,963.32	\$ 29,118,552.96	\$ 65,444,707.95	\$ 712,476.98	\$ 6,189,548.84	\$ 5,098,204.49	\$ 3,980,043.72	\$ 26,743,752.26	\$ 708,239.12	
41	\$ 1,559,770.17	\$ 700,601.33	\$ 60,911,214.75	\$ 10,661,599.33	\$ 28,697,670.30	\$ 64,498,763.18	\$ 702,178.77	\$ 6,100,084.45	\$ 5,024,514.50	\$ 3,922,515.74	\$ 26,357,195.22	\$ 698,002.16	
42	\$ 1,537,225.09	\$ 690,474.76	\$ 60,030,797.58	\$ 10,507,495.44	\$ 28,282,871.13	\$ 63,566,491.21	\$ 692,029.40	\$ 6,011,913.18	\$ 4,951,889.64	\$ 3,865,819.28	\$ 25,976,225.52	\$ 687,913.16	
43	\$ 1,515,005.87	\$ 680,494.57	\$ 59,163,106.05	\$ 10,355,618.98	\$ 27,874,067.50	\$ 62,647,694.39	\$ 682,026.73	\$ 5,925,016.34	\$ 4,880,314.50	\$ 3,809,942.32	\$ 25,600,762.39	\$ 677,969.99	
44	\$ 1,493,107.82	\$ 670,658.63	\$ 58,307,956.23	\$ 10,205,937.77	\$ 27,471,172.77	\$ 61,742,177.95	\$ 672,168.65	\$ 5,839,375.53	\$ 4,809,773.91	\$ 3,754,873.01	\$ 25,230,726.25	\$ 668,170.54	
45	\$ 1,471,526.28	\$ 660,964.86	\$ 57,465,166.83	\$ 10,058,420.06	\$ 27,074,101.52	\$ 60,849,749.95	\$ 662,453.05	\$ 5,754,972.57	\$ 4,740,252.93	\$ 3,700,599.68	\$ 24,866,038.66	\$ 658,512.73	
46	\$ 1,450,256.68	\$ 651,411.20	\$ 56,634,559.20	\$ 9,913,034.58	\$ 26,682,769.58	\$ 59,970,221.20	\$ 652,877.88	\$ 5,671,783.59	\$ 4,671,736.81	\$ 3,647,110.81	\$ 24,506,622.29	\$ 648,994.52	
47	\$ 1,429,294.52	\$ 641,995.63	\$ 55,815,957.27	\$ 9,769,750.53	\$ 26,297,093.99	\$ 59,103,405.25	\$ 643,441.12	\$ 5,589,808.94	\$ 4,604,211.03	\$ 3,594,395.09	\$ 24,152,400.97	\$ 639,613.88	
48	\$ 1,408,635.34	\$ 632,716.16	\$ 55,009,187.49	\$ 9,628,537.52	\$ 25,916,993.00	\$ 58,249,118.35	\$ 634,140.75	\$ 5,509,013.25	\$ 4,537,661.27	\$ 3,542,441.32	\$ 23,803,299.60	\$ 630,368.84	
49	\$ 1,388,274.78	\$ 623,570.81	\$ 54,214,078.84	\$ 9,489,365.61	\$ 25,542,386.03	\$ 57,407,179.40	\$ 624,974.81	\$ 5,429,385.38	\$ 4,472,073.44	\$ 3,491,238.50	\$ 23,459,244.17	\$ 621,257.42	
50	\$ 1,368,208.50	\$ 614,557.66	\$ 53,430,462.79	\$ 9,352,205.31	\$ 25,173,193.66	\$ 56,577,409.93	\$ 615,941.36	\$ 5,350,908.47	\$ 4,407,433.61	\$ 3,440,775.76	\$ 23,120,161.77	\$ 612,277.70	
Total	\$ 99,930,767.75	\$ 44,885,862.15	\$ 3,902,436,763.92	\$ 683,063,329.99	\$ 1,838,591,531.80	\$ 4,132,282,465.62	\$ 44,986,924.69	\$ 390,817,912.59	\$ 321,908,702.70	\$ 251,306,261.13	\$ 1,688,642,855.66	\$ 44,719,339.42	

BAH Identical FSRM

Discounted Total BAH Cost (FSRM)													
Year	Altus	Columbus	Pt Sam	Goodfellow	Keesler	Lackland	Laughlin	Luke	Maxwell	Randolph	Sheppard	Vance	
1	\$ 1,521,682.46	\$ 829,241.50	\$ 10,689,453.98	\$ 2,115,688.04	\$ 5,583,254.11	\$ 9,527,740.65	\$ 1,266,044.75	\$ 2,734,410.64	\$ 2,395,722.12	\$ 4,420,008.41	\$ 3,967,297.56	\$ 1,258,514.24	
2	\$ 1,542,994.67	\$ 549,993.84	\$ 7,014,129.71	\$ 2,114,225.04	\$ 5,145,209.49	\$ 9,511,496.03	\$ 62,140.17	\$ 2,881,545.87	\$ 5,437,642.10	\$ 3,297,943.93	\$ 11,476,465.75	\$ 61,770.55	
3	\$ 135,615.77	\$ 60,914.48	\$ 6,966,872.38	\$ 1,809,255.08	\$ 5,397,225.23	\$ 14,239,280.03	\$ 61,051.63	\$ 2,884,820.96	\$ 2,394,877.83	\$ 341,047.05	\$ 7,832,741.17	\$ 60,688.49	
4	\$ 133,655.57	\$ 60,034.02	\$ 6,795,526.40	\$ 2,182,494.61	\$ 5,480,419.96	\$ 14,057,024.61	\$ 60,169.19	\$ 2,209,512.97	\$ 430,546.99	\$ 336,117.52	\$ 4,612,628.71	\$ 59,811.30	
5	\$ 131,723.70	\$ 59,166.28	\$ 6,697,303.14	\$ 2,219,123.47	\$ 5,401,478.43	\$ 9,972,446.49	\$ 59,299.50	\$ 2,587,979.70	\$ 424,323.82	\$ 331,259.24	\$ 7,875,543.13	\$ 58,946.78	
6	\$ 129,819.75	\$ 58,311.08	\$ 6,600,534.44	\$ 5,633,859.96	\$ 11,949,626.66	\$ 21,663,754.84	\$ 58,442.37	\$ 507,710.33	\$ 418,190.59	\$ 326,471.18	\$ 3,538,383.77	\$ 58,094.75	
7	\$ 127,943.32	\$ 57,468.25	\$ 8,273,758.19	\$ 3,344,220.86	\$ 11,776,905.48	\$ 26,494,274.79	\$ 57,597.64	\$ 500,371.84	\$ 412,146.02	\$ 321,752.33	\$ 6,647,946.14	\$ 57,255.05	
8	\$ 126,094.01	\$ 56,637.60	\$ 5,360,447.30	\$ 3,373,791.63	\$ 11,660,680.84	\$ 8,541,018.40	\$ 56,765.12	\$ 493,139.41	\$ 406,188.82	\$ 317,101.69	\$ 7,551,842.60	\$ 56,427.48	
9	\$ 124,271.44	\$ 55,818.95	\$ 17,649,424.90	\$ 3,113,474.60	\$ 7,285,836.53	\$ 11,310,880.34	\$ 55,944.63	\$ 486,011.52	\$ 400,317.72	\$ 312,518.27	\$ 5,509,148.53	\$ 55,611.87	
10	\$ 122,475.21	\$ 55,012.14	\$ 16,584,553.49	\$ 837,162.81	\$ 2,253,378.83	\$ 9,639,327.24	\$ 55,136.00	\$ 478,986.66	\$ 394,531.49	\$ 308,001.10	\$ 5,018,923.95	\$ 54,808.05	
11	\$ 120,704.94	\$ 54,216.99	\$ 26,036,177.16	\$ 825,062.37	\$ 2,220,808.25	\$ 8,103,992.96	\$ 54,339.06	\$ 472,063.33	\$ 388,828.89	\$ 303,549.22	\$ 4,501,219.07	\$ 54,015.85	
12	\$ 118,960.25	\$ 53,433.33	\$ 14,729,504.52	\$ 813,136.83	\$ 2,188,708.45	\$ 17,754,233.16	\$ 53,553.64	\$ 465,240.08	\$ 383,208.72	\$ 299,161.68	\$ 2,010,205.55	\$ 53,235.10	
13	\$ 117,240.79	\$ 52,661.00	\$ 17,503,512.87	\$ 801,383.66	\$ 2,157,072.63	\$ 7,983,148.38	\$ 52,779.57	\$ 458,515.45	\$ 377,669.78	\$ 294,837.57	\$ 1,981,149.82	\$ 52,465.63	
14	\$ 115,546.18	\$ 51,899.83	\$ 12,430,441.49	\$ 789,800.38	\$ 2,125,894.07	\$ 7,446,193.32	\$ 52,016.68	\$ 451,888.02	\$ 372,210.90	\$ 290,575.96	\$ 1,952,514.07	\$ 51,707.29	
15	\$ 113,876.06	\$ 51,149.66	\$ 6,269,287.45	\$ 778,384.52	\$ 2,095,166.17	\$ 7,336,793.12	\$ 51,264.83	\$ 445,356.38	\$ 366,830.92	\$ 286,375.94	\$ 1,924,292.22	\$ 50,959.90	
16	\$ 112,230.09	\$ 50,410.34	\$ 4,382,742.40	\$ 767,133.67	\$ 2,064,882.42	\$ 4,640,877.14	\$ 50,523.84	\$ 438,919.15	\$ 361,528.71	\$ 282,236.63	\$ 1,896,478.30	\$ 50,223.32	
17	\$ 110,607.90	\$ 49,681.71	\$ 4,319,393.78	\$ 756,045.43	\$ 2,035,036.39	\$ 4,573,797.41	\$ 49,793.57	\$ 432,574.97	\$ 356,303.13	\$ 278,157.15	\$ 1,869,066.40	\$ 49,497.39	
18	\$ 109,009.16	\$ 48,963.60	\$ 4,256,960.80	\$ 745,117.47	\$ 2,005,621.76	\$ 4,507,687.25	\$ 49,073.84	\$ 426,322.48	\$ 351,153.09	\$ 274,136.64	\$ 1,842,050.72	\$ 48,781.95	
19	\$ 107,433.53	\$ 48,255.88	\$ 4,195,430.23	\$ 734,347.47	\$ 1,976,632.29	\$ 4,442,532.66	\$ 48,364.53	\$ 420,160.37	\$ 346,077.49	\$ 270,174.24	\$ 1,815,425.52	\$ 48,076.85	
20	\$ 105,880.68	\$ 47,558.38	\$ 4,134,789.04	\$ 723,733.13	\$ 1,948,061.83	\$ 4,378,319.83	\$ 47,665.46	\$ 414,087.33	\$ 341,075.25	\$ 266,269.11	\$ 1,789,185.17	\$ 47,381.94	
21	\$ 104,350.27	\$ 46,870.97	\$ 4,075,024.36	\$ 713,272.21	\$ 1,919,904.34	\$ 4,315,035.12	\$ 46,976.50	\$ 408,102.07	\$ 336,145.31	\$ 262,420.43	\$ 1,763,324.09	\$ 46,697.08	
22	\$ 102,841.98	\$ 46,193.49	\$ 4,016,123.52	\$ 702,962.50	\$ 1,892,153.84	\$ 4,252,665.15	\$ 46,297.49	\$ 402,203.32	\$ 331,286.63	\$ 258,627.38	\$ 1,737,836.82	\$ 46,022.11	
23	\$ 101,355.49	\$ 45,525.80	\$ 3,958,074.05	\$ 692,801.81	\$ 1,864,804.45	\$ 4,191,196.67	\$ 45,628.31	\$ 396,389.83	\$ 326,498.18	\$ 254,889.15	\$ 1,712,717.94	\$ 45,356.91	
24	\$ 99,890.48	\$ 44,867.77	\$ 3,900,863.63	\$ 682,787.98	\$ 1,837,850.36	\$ 4,130,616.67	\$ 44,968.79	\$ 390,660.37	\$ 321,778.94	\$ 251,204.96	\$ 1,687,962.14	\$ 44,701.31	
25	\$ 98,446.66	\$ 44,219.24	\$ 3,844,480.13	\$ 672,918.89	\$ 1,811,285.88	\$ 4,070,912.30	\$ 44,318.81	\$ 385,013.72	\$ 317,127.91	\$ 247,574.01	\$ 1,663,564.15	\$ 44,055.19	
26	\$ 97,023.70	\$ 43,580.09	\$ 3,788,911.60	\$ 663,192.44	\$ 1,785,105.36	\$ 4,012,070.90	\$ 43,678.22	\$ 378,448.69	\$ 312,544.11	\$ 243,995.55	\$ 1,639,518.82	\$ 43,418.42	
27	\$ 95,621.31	\$ 42,950.18	\$ 3,734,146.27	\$ 653,606.59	\$ 1,759,303.26	\$ 3,954,080.00	\$ 43,046.89	\$ 373,964.10	\$ 308,026.56	\$ 240,468.81	\$ 1,615,821.04	\$ 42,790.84	
28	\$ 94,239.19	\$ 42,329.38	\$ 3,680,172.53	\$ 644,159.29	\$ 1,733,874.10	\$ 3,896,927.31	\$ 42,424.68	\$ 368,558.78	\$ 303,574.31	\$ 236,993.05	\$ 1,592,465.79	\$ 42,172.34	
29	\$ 92,877.04	\$ 41,717.54	\$ 3,626,978.92	\$ 634,848.54	\$ 1,708,812.50	\$ 3,840,600.71	\$ 41,811.47	\$ 363,231.60	\$ 299,186.42	\$ 233,567.53	\$ 1,569,448.12	\$ 41,562.78	
30	\$ 91,534.59	\$ 41,114.55	\$ 3,574,554.18	\$ 625,672.38	\$ 1,684,113.14	\$ 3,785,088.26	\$ 41,207.13	\$ 357,981.41	\$ 294,861.95	\$ 230,191.52	\$ 1,546,763.15	\$ 40,962.02	
31	\$ 90,211.54	\$ 40,520.28	\$ 3,522,887.20	\$ 616,628.84	\$ 1,659,770.79	\$ 3,730,378.19	\$ 40,611.51	\$ 352,807.11	\$ 290,599.98	\$ 226,864.31	\$ 1,524,406.07	\$ 40,369.95	
32	\$ 88,907.61	\$ 39,934.60	\$ 3,471,967.01	\$ 607,716.02	\$ 1,635,780.29	\$ 3,676,458.91	\$ 40,024.51	\$ 347,707.59	\$ 286,399.62	\$ 223,585.19	\$ 1,502,372.14	\$ 39,786.44	
33	\$ 87,622.53	\$ 39,357.38	\$ 3,421,782.83	\$ 598,932.03	\$ 1,612,136.55	\$ 3,623,318.98	\$ 39,445.99	\$ 342,681.79	\$ 282,259.97	\$ 220,353.46	\$ 1,480,656.70	\$ 39,211.36	
34	\$ 86,356.03	\$ 38,788.50	\$ 3,372,324.02	\$ 590,275.00	\$ 1,588,834.56	\$ 3,570,947.14	\$ 38,875.83	\$ 337,728.63	\$ 278,180.15	\$ 217,168.45	\$ 1,459,255.13	\$ 38,644.60	
35	\$ 85,107.83	\$ 38,227.85	\$ 3,323,580.09	\$ 581,743.11	\$ 1,565,869.37	\$ 3,519,332.29	\$ 38,313.92	\$ 332,847.07	\$ 274,159.31	\$ 214,029.47	\$ 1,438,162.90	\$ 38,086.03	
36	\$ 1,410,957.80	\$ 720,698.81	\$ 6,376,316.88	\$ 4,702,026.48	\$ 12,589,857.93	\$ 26,494,129.55	\$ 755,202.52	\$ 3,599,307.04	\$ 3,050,240.62	\$ 3,902,174.04	\$ 10,870,767.60	\$ 750,710.52	
37	\$ 1,420,056.26	\$ 552,163.25	\$ 4,200,603.19	\$ 4,656,466.37	\$ 12,206,929.44	\$ 26,206,198.92	\$ 37,214.34	\$ 3,665,460.02	\$ 4,854,227.28	\$ 3,222,385.69	\$ 15,254,326.88	\$ 36,992.98	
38	\$ 81,470.44	\$ 36,594.04	\$ 4,185,310.69	\$ 4,428,181.56	\$ 12,236,031.78	\$ 28,767,696.30	\$ 36,676.44	\$ 3,644,770.45	\$ 3,013,362.60	\$ 204,882.16	\$ 12,965,663.85	\$ 36,458.28	
39	\$ 80,292.86	\$ 36,065.11	\$ 4,082,375.52	\$ 4,604,107.93	\$ 12,156,014.98	\$ 28,366,038.89	\$ 36,146.31	\$ 3,211,450.50	\$ 258,648.76	\$ 201,920.77	\$ 10,911,805.19	\$ 35,931.31	
40	\$ 79,132.30	\$ 35,543.82	\$ 4,023,368.43	\$ 4,578,515.35	\$ 11,980,474.68	\$ 25,624,305.38	\$ 35,623.85	\$ 3,411,579.38	\$ 254,910.22	\$ 199,002.19	\$ 12,754,315.38	\$ 35,411.96	
41	\$ 77,988.51	\$ 35,030.07	\$ 3,965,235.16	\$ 6,582,990.53	\$ 15,787,974.31	\$ 32,364,011.85	\$ 35,108.94	\$ 305,004.22	\$ 251,225.73	\$ 196,125.79	\$ 10,032,823.37	\$ 34,900.11	
42	\$ 76,861.25	\$ 34,523.74	\$ 4,970,415.23	\$ 5,161,271.12	\$ 15,559,773.26	\$ 34,986,238.85	\$ 34,601.47	\$ 300,595.66	\$ 247,594.48	\$ 193,290.96	\$ 11,786,585.14	\$ 34,395.66	
43	\$ 75,750.29	\$ 34,024.73	\$ 3,220,259.56	\$ 5,133,472.67	\$ 15,334,870.64	\$ 23,925,278.67	\$ 34,101.34	\$ 296,250.82	\$ 244,015.72	\$ 190,497.12	\$ 12,216,957.09	\$ 33,898.50	
44	\$ 74,655.39	\$ 33,532.93	\$ 10,602,796.02	\$ 4,932,184.26	\$ 12,618,278.50	\$ 25,317,603.23	\$ 33,608.43	\$ 291,968.78	\$ 240,488.70	\$ 187,743.65	\$ 10,783,290.51	\$ 33,408.53	
45	\$ 73,576.31	\$ 33,048.24	\$ 9,963,080.31	\$ 5,021,921.00	\$ 1,353,705.08	\$ 24,045,698.40	\$ 33,122.65	\$ 287,748.63	\$ 237,012.65	\$ 185,029.98	\$ 10,474,902.86	\$ 32,925.64	
46	\$ 72,512.83	\$ 32,570.56	\$ 15,641,091.82	\$ 495,651.73	\$ 1,334,138.48	\$ 22,859,496.05	\$ 32,643.89	\$ 283,589.48	\$ 233,586.84	\$ 182,355.54	\$ 10,056,069.56	\$ 32,449.73	
47	\$ 71,464.73	\$ 32,099.78	\$ 8,848,669.73	\$ 488,487.53	\$ 1,314,854.70	\$ 28,396,780.58	\$ 32,172.06	\$ 279,490.45	\$ 230,210.55	\$ 179,719.75	\$ 1,207,620.05	\$ 31,980.69	
48	\$ 70,431.77	\$ 31,635.81	\$ 10,515,140.16	\$ 481,426.88	\$ 1,295,849.65	\$ 22,270,568.48	\$ 31,707.04	\$ 275,450.66	\$ 226,883.06	\$ 177,122.07	\$ 1,190,164.98	\$ 31,518.44	
49	\$ 69,413.74	\$ 31,178.54	\$ 7,467,520.12	\$ 474,468.28	\$ 1,277,119.30	\$ 21,695,413.96	\$ 31,248.74	\$ 271,469.27	\$ 223,603.67	\$ 174,561.92	\$ 1,174,962.21	\$ 31,062.87	
50	\$ 68,410.43	\$ 30,727.88	\$ 3,766,240.34	\$ 467,610.27	\$ 1,258,659.68	\$ 21,380,761.54	\$ 30,797.07	\$ 267,545.42	\$ 220,371.68	\$ 172,038.79	\$ 1,156,008.09	\$ 30,613.88	
Total	\$ 10,447,126.61	\$ 4,696,463.79	\$ 348,030,537.16	\$ 91,848,720.60	\$ 247,062,031.03	\$ 657,394,667.88	\$ 4,169,571.15	\$ 46,120,624.30	\$ 35,108,386.26	\$ 26,288,478.54	\$ 242,222,045.90	\$ 4,144,770.25	

O&M

Discounted Total Periodic and Corrective Maintenance Cost												
Year	Altus	Columbus	Ft Sam	Goodfellow	Keesler	Lackland	Laughlin	Luke	Maxwell	Randolph	Sheppard	Vance
1	\$ 770,297.41	\$ 105,054.07	\$ 1,597,300.33	\$ 1,601,605.45	\$ 2,869,272.26	\$ 5,912,456.26	\$ 433,250.80	\$ 268,804.99	\$ 1,515,255.27	\$ 412,159.42	\$ 2,943,736.30	\$ 63,341.53
2	\$ 759,133.68	\$ 103,531.54	\$ 1,574,151.05	\$ 1,578,393.78	\$ 2,827,688.61	\$ 5,826,768.49	\$ 426,971.80	\$ 264,909.27	\$ 1,493,295.05	\$ 406,186.10	\$ 2,901,073.45	\$ 62,423.54
3	\$ 748,131.74	\$ 102,031.09	\$ 1,551,337.27	\$ 1,555,518.51	\$ 2,786,707.61	\$ 5,742,322.57	\$ 420,783.81	\$ 261,070.00	\$ 1,471,653.09	\$ 400,299.34	\$ 2,859,028.91	\$ 61,518.85
4	\$ 737,289.26	\$ 100,552.37	\$ 1,528,854.12	\$ 1,532,974.76	\$ 2,746,320.54	\$ 5,659,100.51	\$ 414,685.49	\$ 257,286.38	\$ 1,450,324.78	\$ 394,497.90	\$ 2,817,593.71	\$ 60,627.27
5	\$ 726,603.90	\$ 99,095.09	\$ 1,506,696.81	\$ 1,510,757.74	\$ 2,706,518.80	\$ 5,577,084.56	\$ 408,675.56	\$ 253,557.59	\$ 1,429,305.58	\$ 388,780.54	\$ 2,776,759.02	\$ 59,748.62
6	\$ 716,073.41	\$ 97,658.93	\$ 1,484,860.63	\$ 1,488,862.70	\$ 2,667,293.89	\$ 5,496,257.24	\$ 402,752.72	\$ 249,882.84	\$ 1,408,591.01	\$ 383,146.04	\$ 2,736,516.13	\$ 58,882.69
7	\$ 705,695.54	\$ 96,243.59	\$ 1,463,340.91	\$ 1,467,284.98	\$ 2,628,637.45	\$ 5,416,601.34	\$ 396,915.73	\$ 246,261.35	\$ 1,388,176.65	\$ 377,593.20	\$ 2,696,856.48	\$ 58,029.32
8	\$ 695,468.07	\$ 94,848.75	\$ 1,442,133.07	\$ 1,446,019.98	\$ 2,590,541.26	\$ 5,338,099.87	\$ 391,163.32	\$ 242,692.35	\$ 1,368,058.15	\$ 372,120.83	\$ 2,657,771.60	\$ 57,188.32
9	\$ 685,388.82	\$ 93,474.13	\$ 1,421,232.59	\$ 1,425,063.16	\$ 2,552,997.18	\$ 5,260,736.11	\$ 385,494.29	\$ 239,175.07	\$ 1,348,231.22	\$ 366,727.78	\$ 2,619,253.17	\$ 56,359.50
10	\$ 675,455.65	\$ 92,119.43	\$ 1,400,635.02	\$ 1,404,410.08	\$ 2,515,997.22	\$ 5,184,493.56	\$ 379,907.42	\$ 235,708.76	\$ 1,328,691.63	\$ 361,412.88	\$ 2,581,292.98	\$ 55,542.70
11	\$ 665,666.43	\$ 90,784.37	\$ 1,380,335.96	\$ 1,384,056.31	\$ 2,479,533.50	\$ 5,109,355.97	\$ 374,401.51	\$ 232,292.69	\$ 1,309,435.23	\$ 356,175.02	\$ 2,543,882.94	\$ 54,737.73
12	\$ 656,019.09	\$ 89,468.65	\$ 1,360,331.09	\$ 1,363,997.52	\$ 2,443,598.23	\$ 5,035,307.33	\$ 368,975.40	\$ 228,926.13	\$ 1,290,457.91	\$ 351,013.06	\$ 2,507,015.07	\$ 53,944.43
13	\$ 646,511.57	\$ 88,172.01	\$ 1,340,616.15	\$ 1,344,229.44	\$ 2,408,183.76	\$ 4,962,331.86	\$ 363,627.93	\$ 225,608.36	\$ 1,271,755.62	\$ 345,925.91	\$ 2,470,681.52	\$ 53,162.63
14	\$ 637,141.84	\$ 86,894.15	\$ 1,321,186.93	\$ 1,324,747.85	\$ 2,373,282.55	\$ 4,890,414.01	\$ 358,357.96	\$ 222,338.67	\$ 1,253,324.38	\$ 340,912.49	\$ 2,434,874.54	\$ 52,392.15
15	\$ 627,907.90	\$ 85,634.82	\$ 1,302,039.29	\$ 1,305,548.61	\$ 2,338,887.15	\$ 4,819,538.44	\$ 353,164.37	\$ 219,116.38	\$ 1,235,160.26	\$ 335,971.73	\$ 2,399,586.50	\$ 51,632.85
16	\$ 618,807.78	\$ 84,393.73	\$ 1,283,169.15	\$ 1,286,627.61	\$ 2,304,990.23	\$ 4,749,690.06	\$ 348,046.05	\$ 215,940.78	\$ 1,217,259.39	\$ 331,102.58	\$ 2,364,809.89	\$ 50,884.54
17	\$ 609,839.56	\$ 83,170.63	\$ 1,264,572.50	\$ 1,267,980.84	\$ 2,271,584.58	\$ 4,680,853.97	\$ 343,001.90	\$ 212,811.20	\$ 1,199,617.95	\$ 326,303.99	\$ 2,330,537.28	\$ 50,147.09
18	\$ 601,001.30	\$ 81,965.26	\$ 1,246,245.36	\$ 1,249,604.30	\$ 2,238,663.06	\$ 4,613,015.51	\$ 338,030.86	\$ 209,726.98	\$ 1,182,232.18	\$ 321,574.95	\$ 2,296,761.38	\$ 49,420.32
19	\$ 592,291.14	\$ 80,777.36	\$ 1,228,183.84	\$ 1,231,494.10	\$ 2,206,218.67	\$ 4,546,160.21	\$ 333,131.86	\$ 206,687.46	\$ 1,165,098.38	\$ 316,914.44	\$ 2,263,474.98	\$ 48,704.08
20	\$ 583,707.21	\$ 79,606.67	\$ 1,210,384.07	\$ 1,213,646.36	\$ 2,174,244.49	\$ 4,480,273.83	\$ 328,303.86	\$ 203,691.99	\$ 1,148,212.89	\$ 312,321.48	\$ 2,230,670.99	\$ 47,998.22
21	\$ 575,247.68	\$ 78,452.95	\$ 1,192,842.27	\$ 1,196,057.28	\$ 2,142,733.70	\$ 4,415,342.33	\$ 323,545.84	\$ 200,739.93	\$ 1,131,572.13	\$ 307,795.08	\$ 2,198,342.43	\$ 47,302.60
22	\$ 566,910.76	\$ 77,315.96	\$ 1,175,554.70	\$ 1,178,723.11	\$ 2,111,679.58	\$ 4,351,351.86	\$ 318,856.76	\$ 197,830.65	\$ 1,115,172.53	\$ 303,334.28	\$ 2,166,482.39	\$ 46,617.05
23	\$ 558,694.66	\$ 76,195.43	\$ 1,158,517.68	\$ 1,161,640.17	\$ 2,081,075.53	\$ 4,288,288.79	\$ 314,235.65	\$ 194,963.54	\$ 1,099,010.61	\$ 298,938.13	\$ 2,135,084.10	\$ 45,941.44
24	\$ 550,597.64	\$ 75,091.15	\$ 1,141,727.57	\$ 1,144,804.81	\$ 2,050,915.02	\$ 4,226,139.67	\$ 309,681.51	\$ 192,137.99	\$ 1,083,082.92	\$ 294,605.69	\$ 2,104,140.85	\$ 45,275.63
25	\$ 542,617.96	\$ 74,002.87	\$ 1,125,180.79	\$ 1,128,213.43	\$ 2,021,191.61	\$ 4,164,891.27	\$ 305,193.37	\$ 189,353.38	\$ 1,067,386.07	\$ 290,336.05	\$ 2,073,646.06	\$ 44,619.46
26	\$ 534,753.93	\$ 72,930.37	\$ 1,108,873.82	\$ 1,111,862.51	\$ 1,991,898.98	\$ 4,104,530.53	\$ 300,770.28	\$ 186,609.13	\$ 1,051,916.70	\$ 286,128.28	\$ 2,043,593.21	\$ 43,972.80
27	\$ 527,003.88	\$ 71,873.41	\$ 1,092,803.19	\$ 1,095,748.56	\$ 1,963,030.88	\$ 4,045,044.58	\$ 296,411.29	\$ 183,904.64	\$ 1,036,671.53	\$ 281,981.49	\$ 2,013,975.92	\$ 43,335.51
28	\$ 519,366.14	\$ 70,831.76	\$ 1,076,965.46	\$ 1,079,868.15	\$ 1,934,581.16	\$ 3,986,420.75	\$ 292,115.48	\$ 181,239.36	\$ 1,021,647.31	\$ 277,894.80	\$ 1,984,787.86	\$ 42,707.46
29	\$ 511,839.09	\$ 69,805.22	\$ 1,061,357.26	\$ 1,064,217.89	\$ 1,906,543.75	\$ 3,928,646.53	\$ 287,881.92	\$ 178,612.70	\$ 1,006,840.83	\$ 273,867.34	\$ 1,956,022.82	\$ 42,088.51
30	\$ 504,421.14	\$ 68,793.55	\$ 1,045,975.28	\$ 1,048,794.44	\$ 1,878,912.68	\$ 3,871,709.63	\$ 283,709.72	\$ 176,024.11	\$ 992,248.93	\$ 269,898.25	\$ 1,927,674.67	\$ 41,478.53
31	\$ 497,110.68	\$ 67,796.54	\$ 1,030,816.21	\$ 1,033,594.52	\$ 1,851,682.06	\$ 3,815,597.89	\$ 279,597.98	\$ 173,473.04	\$ 977,868.51	\$ 265,986.68	\$ 1,899,737.35	\$ 40,877.40
32	\$ 489,906.18	\$ 66,813.98	\$ 1,015,876.85	\$ 1,018,614.89	\$ 1,824,846.09	\$ 3,760,299.37	\$ 275,545.84	\$ 170,958.94	\$ 963,696.50	\$ 262,131.80	\$ 1,872,204.93	\$ 40,284.97
33	\$ 482,806.09	\$ 65,845.66	\$ 1,001,154.00	\$ 1,003,852.35	\$ 1,798,399.04	\$ 3,705,802.28	\$ 271,552.42	\$ 168,481.27	\$ 949,729.89	\$ 258,332.79	\$ 1,845,071.52	\$ 39,701.13
34	\$ 475,808.90	\$ 64,891.38	\$ 986,644.52	\$ 989,303.77	\$ 1,772,335.29	\$ 3,652,095.00	\$ 267,616.88	\$ 166,039.51	\$ 935,965.69	\$ 254,588.84	\$ 1,818,331.36	\$ 39,125.75
35	\$ 468,913.12	\$ 63,950.92	\$ 972,345.32	\$ 974,966.03	\$ 1,746,649.27	\$ 3,599,166.09	\$ 263,738.37	\$ 163,633.14	\$ 922,400.97	\$ 250,899.14	\$ 1,791,978.73	\$ 38,558.71
36	\$ 462,117.28	\$ 63,024.10	\$ 958,253.36	\$ 960,836.09	\$ 1,721,335.51	\$ 3,547,004.26	\$ 259,916.08	\$ 161,261.65	\$ 909,032.84	\$ 247,262.92	\$ 1,766,008.02	\$ 37,999.89
37	\$ 455,419.93	\$ 62,110.70	\$ 944,365.63	\$ 946,910.93	\$ 1,696,388.62	\$ 3,495,598.40	\$ 256,149.18	\$ 158,924.52	\$ 895,858.45	\$ 243,679.40	\$ 1,740,413.70	\$ 37,449.17
38	\$ 448,819.64	\$ 61,210.55	\$ 930,679.17	\$ 933,187.58	\$ 1,671,803.28	\$ 3,444,937.56	\$ 252,436.87	\$ 156,621.27	\$ 882,874.99	\$ 240,147.82	\$ 1,715,190.31	\$ 36,906.42
39	\$ 442,315.01	\$ 60,323.44	\$ 917,191.07	\$ 919,663.13	\$ 1,647,574.25	\$ 3,395,010.92	\$ 248,778.36	\$ 154,351.40	\$ 870,079.70	\$ 236,667.41	\$ 1,690,332.48	\$ 36,371.55
40	\$ 435,904.64	\$ 59,449.19	\$ 903,898.44	\$ 906,334.67	\$ 1,623,696.36	\$ 3,345,807.87	\$ 245,172.88	\$ 152,114.42	\$ 857,469.85	\$ 233,237.45	\$ 1,665,834.91	\$ 35,844.42
41	\$ 429,587.19	\$ 58,587.60	\$ 890,798.47	\$ 893,199.39	\$ 1,600,164.53	\$ 3,297,317.90	\$ 241,619.65	\$ 149,909.86	\$ 845,042.75	\$ 229,857.20	\$ 1,641,692.38	\$ 35,324.94
42	\$ 423,361.28	\$ 57,738.51	\$ 877,888.34	\$ 880,254.47	\$ 1,576,973.74	\$ 3,249,530.68	\$ 238,117.92	\$ 147,737.26	\$ 832,795.76	\$ 226,525.94	\$ 1,617,899.73	\$ 34,812.98
43	\$ 417,225.61	\$ 56,901.72	\$ 865,165.32	\$ 867,497.16	\$ 1,554,119.04	\$ 3,202,436.03	\$ 234,666.93	\$ 145,596.14	\$ 820,726.25	\$ 223,242.95	\$ 1,594,451.91	\$ 34,308.45
44	\$ 411,178.87	\$ 56,077.06	\$ 852,626.70	\$ 854,924.74	\$ 1,531,595.58	\$ 3,156,023.92	\$ 231,265.96	\$ 143,486.05	\$ 808,831.67	\$ 220,007.55	\$ 1,571,343.91	\$ 33,811.22
45	\$ 405,219.75	\$ 55,264.35	\$ 840,269.79	\$ 842,534.52	\$ 1,509,398.54	\$ 3,110,284.44	\$ 227,914.28	\$ 141,406.54	\$ 797,109.47	\$ 216,819.03	\$ 1,548,570.81	\$ 33,321.21
46	\$ 399,347.00	\$ 54,463.41	\$ 828,091.96	\$ 830,323.88	\$ 1,487,523.20	\$ 3,065,207.85	\$ 224,611.18	\$ 139,357.17	\$ 785,557.16	\$ 213,676.73	\$ 1,526,127.76	\$ 32,838.29
47	\$ 393,559.36	\$ 53,674.09	\$ 816,090.63	\$ 818,290.20	\$ 1,465,964.89	\$ 3,020,784.55	\$ 221,355.94	\$ 137,337.50	\$ 774,172.27	\$ 210,579.96	\$ 1,504,009.96	\$ 32,362.37
48	\$ 387,855.60	\$ 52,896.20	\$ 804,263.23	\$ 806,430.92	\$ 1,444,719.03	\$ 2,977,005.07	\$ 218,147.89	\$ 135,347.10	\$ 762,952.38	\$ 207,528.08	\$ 1,482,212.72	\$ 31,893.35
49	\$ 382,234.51	\$ 52,129.59	\$ 792,607.24	\$ 794,743.52	\$ 1,423,781.07	\$ 2,933,860.07	\$ 214,986.32	\$ 133,385.55	\$ 751,895.10	\$ 204,520.43	\$ 1,460,731.37	\$ 31,431.13
50	\$ 376,694.88	\$ 51,374.09	\$ 781,120.18	\$ 783,225.49	\$ 1,403,146.56	\$ 2,891,340.35	\$ 211,870.58	\$ 131,452.43	\$ 740,998.07	\$ 201,556.36	\$ 1,439,561.35	\$ 30,975.61
Total	\$ 27,535,269.72	\$ 3,755,292.42	\$ 57,097,550.58	\$ 57,251,442.68	\$ 102,565,819.86	\$ 211,348,338.16	\$ 15,487,105.98	\$ 9,608,779.41	\$ 54,164,744.45	\$ 14,733,167.57	\$ 105,227,632.38	\$ 2,264,224.34
		AETC NPV =	\$ 661,039,367.56									

Utilities

Discounted Total Utilities Cost												
Year	Altus	Columbus	Ft Sam	Goodfellow	Keesler	Lackland	Laughlin	Luke	Maxwell	Randolph	Sheppard	Vance
1	\$ 98,690.70	\$ 38,309.25	\$ 2,024,714.99	\$ 502,012.15	\$ 1,010,777.64	\$ 2,143,966.65	\$ 40,697.59	\$ 231,144.58	\$ 188,498.09	\$ 130,386.11	\$ 1,350,637.08	\$ 38,239.91
2	\$ 97,260.40	\$ 37,754.04	\$ 1,995,371.30	\$ 494,736.62	\$ 996,128.69	\$ 2,112,894.67	\$ 40,107.77	\$ 227,794.66	\$ 185,766.23	\$ 128,496.46	\$ 1,331,062.63	\$ 37,685.71
3	\$ 95,850.83	\$ 37,206.88	\$ 1,966,452.87	\$ 487,566.52	\$ 981,692.04	\$ 2,082,273.01	\$ 39,526.49	\$ 224,493.28	\$ 183,073.97	\$ 126,634.19	\$ 1,311,771.87	\$ 37,139.54
4	\$ 94,461.69	\$ 36,667.65	\$ 1,937,953.56	\$ 480,500.34	\$ 967,464.62	\$ 2,052,095.14	\$ 38,953.65	\$ 221,239.76	\$ 180,420.72	\$ 124,798.91	\$ 1,292,760.68	\$ 36,601.29
5	\$ 93,092.68	\$ 36,136.24	\$ 1,909,867.27	\$ 473,536.57	\$ 953,443.39	\$ 2,022,354.63	\$ 38,389.10	\$ 218,033.39	\$ 177,805.93	\$ 122,990.23	\$ 1,274,025.02	\$ 36,070.83
6	\$ 91,743.51	\$ 35,612.52	\$ 1,882,188.04	\$ 466,673.72	\$ 939,625.37	\$ 1,993,045.14	\$ 37,832.74	\$ 214,873.48	\$ 175,229.03	\$ 121,207.77	\$ 1,255,560.89	\$ 35,548.07
7	\$ 90,413.89	\$ 35,096.40	\$ 1,854,909.95	\$ 459,910.33	\$ 926,007.61	\$ 1,964,160.43	\$ 37,284.44	\$ 211,759.37	\$ 172,689.48	\$ 119,451.13	\$ 1,237,364.35	\$ 35,032.88
8	\$ 89,103.55	\$ 34,587.76	\$ 1,828,027.20	\$ 453,244.96	\$ 912,587.21	\$ 1,935,694.33	\$ 36,744.08	\$ 208,690.40	\$ 170,186.73	\$ 117,719.95	\$ 1,219,431.54	\$ 34,525.16
9	\$ 87,812.19	\$ 34,086.48	\$ 1,801,534.05	\$ 446,676.20	\$ 899,361.31	\$ 1,907,640.79	\$ 36,211.56	\$ 205,665.90	\$ 167,720.26	\$ 116,013.87	\$ 1,201,758.62	\$ 34,024.79
10	\$ 86,539.55	\$ 33,592.48	\$ 1,775,424.86	\$ 440,202.63	\$ 886,327.09	\$ 1,879,993.83	\$ 35,686.75	\$ 202,685.23	\$ 165,289.53	\$ 114,332.51	\$ 1,184,341.83	\$ 33,531.68
11	\$ 85,285.35	\$ 33,105.63	\$ 1,749,694.07	\$ 433,822.88	\$ 873,481.77	\$ 1,852,747.54	\$ 35,169.55	\$ 199,747.77	\$ 162,894.03	\$ 112,675.52	\$ 1,167,177.45	\$ 33,045.71
12	\$ 84,049.33	\$ 32,625.84	\$ 1,724,336.18	\$ 427,535.59	\$ 860,822.61	\$ 1,825,896.12	\$ 34,659.85	\$ 196,852.87	\$ 160,533.25	\$ 111,042.54	\$ 1,150,261.84	\$ 32,566.79
13	\$ 82,831.23	\$ 32,153.00	\$ 1,699,345.80	\$ 421,339.42	\$ 848,346.92	\$ 1,799,433.86	\$ 34,157.53	\$ 193,999.93	\$ 158,206.68	\$ 109,433.22	\$ 1,133,591.37	\$ 32,094.81
14	\$ 81,630.77	\$ 31,687.01	\$ 1,674,717.60	\$ 415,233.05	\$ 836,052.04	\$ 1,773,355.11	\$ 33,662.50	\$ 191,188.34	\$ 155,913.83	\$ 107,847.24	\$ 1,117,162.51	\$ 31,629.66
15	\$ 80,447.72	\$ 31,227.78	\$ 1,650,446.33	\$ 409,215.18	\$ 823,935.34	\$ 1,747,654.31	\$ 33,174.63	\$ 188,417.49	\$ 153,654.21	\$ 106,284.23	\$ 1,100,971.75	\$ 31,171.26
16	\$ 79,281.81	\$ 30,775.21	\$ 1,626,526.82	\$ 403,284.53	\$ 811,994.25	\$ 1,722,325.99	\$ 32,693.84	\$ 185,686.80	\$ 151,427.33	\$ 104,743.88	\$ 1,085,015.64	\$ 30,719.50
17	\$ 78,132.80	\$ 30,329.19	\$ 1,602,953.97	\$ 397,439.83	\$ 800,226.22	\$ 1,697,364.74	\$ 32,220.02	\$ 182,995.69	\$ 149,232.73	\$ 103,225.85	\$ 1,069,290.78	\$ 30,274.29
18	\$ 77,000.44	\$ 29,889.64	\$ 1,579,722.75	\$ 391,679.83	\$ 788,628.74	\$ 1,672,765.25	\$ 31,753.06	\$ 180,343.58	\$ 147,069.94	\$ 101,729.83	\$ 1,053,793.81	\$ 29,835.54
19	\$ 75,884.49	\$ 29,456.45	\$ 1,556,828.22	\$ 386,003.31	\$ 777,199.34	\$ 1,648,522.28	\$ 31,292.87	\$ 177,729.90	\$ 144,938.49	\$ 100,255.48	\$ 1,038,521.43	\$ 29,403.14
20	\$ 74,784.72	\$ 29,029.55	\$ 1,534,265.49	\$ 380,409.06	\$ 765,935.58	\$ 1,624,630.65	\$ 30,839.35	\$ 175,154.11	\$ 142,837.93	\$ 98,802.50	\$ 1,023,470.40	\$ 28,977.01
21	\$ 73,700.88	\$ 28,608.83	\$ 1,512,029.76	\$ 374,895.88	\$ 754,835.06	\$ 1,601,085.28	\$ 30,392.41	\$ 172,615.64	\$ 140,767.82	\$ 97,370.58	\$ 1,008,637.50	\$ 28,557.05
22	\$ 72,632.75	\$ 28,194.21	\$ 1,490,116.28	\$ 369,462.61	\$ 743,895.42	\$ 1,577,881.14	\$ 29,951.94	\$ 170,113.97	\$ 138,727.71	\$ 95,959.42	\$ 994,019.56	\$ 28,143.18
23	\$ 71,580.10	\$ 27,785.60	\$ 1,468,520.39	\$ 364,108.08	\$ 733,114.33	\$ 1,555,013.30	\$ 29,517.85	\$ 167,648.55	\$ 136,717.16	\$ 94,568.70	\$ 979,613.48	\$ 27,735.31
24	\$ 70,542.71	\$ 27,382.91	\$ 1,447,237.49	\$ 358,831.15	\$ 722,489.49	\$ 1,532,476.88	\$ 29,090.06	\$ 165,218.86	\$ 134,735.75	\$ 93,198.14	\$ 965,416.18	\$ 27,333.35
25	\$ 69,520.35	\$ 26,986.05	\$ 1,426,263.03	\$ 353,630.70	\$ 712,018.62	\$ 1,510,267.07	\$ 28,668.46	\$ 162,824.38	\$ 132,783.06	\$ 91,847.44	\$ 951,424.64	\$ 26,937.21
26	\$ 68,512.81	\$ 26,594.95	\$ 1,405,592.56	\$ 348,505.62	\$ 701,699.51	\$ 1,488,379.14	\$ 28,252.98	\$ 160,464.61	\$ 130,858.67	\$ 90,516.32	\$ 937,635.88	\$ 26,546.82
27	\$ 67,519.87	\$ 26,209.52	\$ 1,385,221.65	\$ 343,454.81	\$ 691,529.95	\$ 1,466,808.43	\$ 27,843.51	\$ 158,139.03	\$ 128,962.16	\$ 89,204.49	\$ 924,046.96	\$ 26,162.08
28	\$ 66,541.32	\$ 25,829.67	\$ 1,365,145.97	\$ 338,477.20	\$ 681,507.78	\$ 1,445,550.33	\$ 27,439.98	\$ 155,847.16	\$ 127,093.15	\$ 87,911.67	\$ 910,654.97	\$ 25,782.92
29	\$ 65,576.95	\$ 25,455.33	\$ 1,345,361.25	\$ 333,571.74	\$ 671,630.86	\$ 1,424,600.33	\$ 27,042.30	\$ 153,588.51	\$ 125,251.22	\$ 86,637.59	\$ 897,457.07	\$ 25,409.25
30	\$ 64,626.56	\$ 25,086.41	\$ 1,325,863.26	\$ 328,737.36	\$ 661,897.08	\$ 1,403,953.95	\$ 26,650.38	\$ 151,362.59	\$ 123,435.98	\$ 85,381.97	\$ 884,450.45	\$ 25,041.00
31	\$ 63,689.95	\$ 24,722.84	\$ 1,306,647.85	\$ 323,973.06	\$ 652,304.37	\$ 1,383,606.79	\$ 26,264.15	\$ 149,168.93	\$ 121,647.06	\$ 84,144.55	\$ 871,632.33	\$ 24,678.09
32	\$ 62,766.90	\$ 24,364.53	\$ 1,287,710.92	\$ 319,277.79	\$ 642,850.68	\$ 1,363,554.52	\$ 25,883.51	\$ 147,007.06	\$ 119,884.06	\$ 82,925.06	\$ 858,999.97	\$ 24,320.44
33	\$ 61,857.24	\$ 24,011.43	\$ 1,269,048.45	\$ 314,650.58	\$ 633,534.00	\$ 1,343,792.86	\$ 25,508.38	\$ 144,876.52	\$ 118,146.61	\$ 81,723.25	\$ 846,550.70	\$ 23,967.97
34	\$ 60,960.76	\$ 23,663.43	\$ 1,250,656.44	\$ 310,090.43	\$ 624,352.35	\$ 1,324,317.60	\$ 25,138.70	\$ 142,776.86	\$ 116,434.34	\$ 80,538.86	\$ 834,281.85	\$ 23,620.60
35	\$ 60,077.27	\$ 23,320.49	\$ 1,232,530.99	\$ 305,596.36	\$ 615,303.77	\$ 1,305,124.59	\$ 24,774.37	\$ 140,707.63	\$ 114,746.88	\$ 79,371.63	\$ 822,190.81	\$ 23,278.28
36	\$ 59,206.58	\$ 22,982.51	\$ 1,214,668.22	\$ 301,167.43	\$ 606,386.32	\$ 1,286,209.74	\$ 24,415.32	\$ 138,668.39	\$ 113,083.88	\$ 78,221.31	\$ 810,275.00	\$ 22,940.91
37	\$ 58,348.52	\$ 22,649.43	\$ 1,197,064.33	\$ 296,802.68	\$ 597,598.11	\$ 1,267,569.02	\$ 24,061.47	\$ 136,658.71	\$ 111,444.99	\$ 77,087.67	\$ 798,531.88	\$ 22,608.43
38	\$ 57,502.89	\$ 22,321.18	\$ 1,179,715.57	\$ 292,501.20	\$ 588,937.27	\$ 1,249,198.45	\$ 23,712.76	\$ 134,678.14	\$ 109,829.84	\$ 75,970.46	\$ 786,958.96	\$ 22,280.78
39	\$ 56,669.51	\$ 21,997.68	\$ 1,162,618.24	\$ 288,262.05	\$ 580,401.95	\$ 1,231,094.13	\$ 23,369.09	\$ 132,726.29	\$ 108,238.10	\$ 74,869.44	\$ 775,553.75	\$ 21,957.87
40	\$ 55,848.21	\$ 21,678.87	\$ 1,145,768.70	\$ 284,084.34	\$ 571,990.32	\$ 1,213,252.18	\$ 23,030.41	\$ 130,802.72	\$ 106,669.44	\$ 73,784.37	\$ 764,313.84	\$ 21,639.64
41	\$ 55,038.82	\$ 21,364.69	\$ 1,129,163.36	\$ 279,967.17	\$ 563,700.61	\$ 1,195,668.82	\$ 22,696.64	\$ 128,907.03	\$ 105,123.50	\$ 72,715.03	\$ 753,236.83	\$ 21,326.02
42	\$ 54,241.16	\$ 21,055.05	\$ 1,112,798.67	\$ 275,909.68	\$ 555,531.04	\$ 1,178,340.29	\$ 22,367.70	\$ 127,038.81	\$ 103,599.97	\$ 71,661.19	\$ 742,320.36	\$ 21,016.94
43	\$ 53,455.05	\$ 20,749.91	\$ 1,096,671.16	\$ 271,910.99	\$ 547,479.86	\$ 1,161,262.89	\$ 22,043.53	\$ 125,197.67	\$ 102,098.52	\$ 70,622.63	\$ 731,562.09	\$ 20,712.35
44	\$ 52,680.34	\$ 20,449.18	\$ 1,080,777.37	\$ 267,970.25	\$ 539,545.37	\$ 1,144,432.99	\$ 21,724.06	\$ 123,383.21	\$ 100,618.84	\$ 69,599.11	\$ 720,959.74	\$ 20,412.17
45	\$ 51,916.86	\$ 20,152.82	\$ 1,065,113.93	\$ 264,086.62	\$ 531,725.87	\$ 1,127,847.01	\$ 21,409.22	\$ 121,595.04	\$ 99,160.59	\$ 68,590.43	\$ 710,511.05	\$ 20,116.34
46	\$ 51,164.44	\$ 19,860.75	\$ 1,049,677.50	\$ 260,259.28	\$ 524,019.70	\$ 1,111,501.40	\$ 21,098.94	\$ 119,832.80	\$ 97,723.48	\$ 67,596.36	\$ 700,213.79	\$ 19,824.80
47	\$ 50,422.93	\$ 19,572.91	\$ 1,034,464.78	\$ 256,487.40	\$ 516,425.21	\$ 1,095,392.68	\$ 20,793.16	\$ 118,096.09	\$ 96,307.20	\$ 66,616.70	\$ 690,065.76	\$ 19,537.49
48	\$ 49,692.16	\$ 19,289.25	\$ 1,019,472.54	\$ 252,770.20	\$ 508,940.79	\$ 1,079,517.43	\$ 20,491.81	\$ 116,384.55	\$ 94,911.44	\$ 65,651.24	\$ 680,064.81	\$ 19,254.33
49	\$ 48,971.98	\$ 19,009.69	\$ 1,004,697.57	\$ 249,106.86	\$ 501,564.83	\$ 1,063,872.25	\$ 20,194.83	\$ 114,697.82	\$ 93,535.91	\$ 64,699.78	\$ 670,208.80	\$ 18,975.29
50	\$ 48,262.24	\$ 18,734.19	\$ 990,136.74	\$ 245,496.62	\$ 494,295.78	\$ 1,048,453.81	\$ 19,902.15	\$ 113,035.53	\$ 92,180.32	\$ 63,762.10	\$ 660,495.63	\$ 18,700.28
Total	\$ 3,527,825.76	\$ 1,369,413.28	\$ 72,376,036.30	\$ 17,945,068.62	\$ 36,131,544.10	\$ 76,638,839.74	\$ 1,454,787.44	\$ 8,262,559.63	\$ 6,738,106.01	\$ 4,660,818.91	\$ 48,280,256.12	\$ 1,366,934.73
		AETC NPV =	\$ 278,752,190.87									

Moves Status Quo

Discounted Total Moves Cost (Status Quo)													
Year	Altus	Columbus	Pt Sam	Goodfellow	Keesler	Lackland	Laughlin	Luke	Maxwell	Randolph	Sheppard	Vance	
1	\$ 863,513.92	\$ 380,714.63	\$ 18,951,622.12	\$ 4,490,065.37	\$ 9,246,000.10	\$ 20,067,834.67	\$ 360,004.72	\$ 1,918,195.72	\$ 1,806,377.84	\$ 1,220,432.66	\$ 11,817,667.93	\$ 334,587.72	
2	\$ 847,661.98	\$ 373,725.66	\$ 18,603,717.94	\$ 4,407,639.05	\$ 9,076,266.77	\$ 19,699,439.63	\$ 353,395.94	\$ 1,882,982.46	\$ 1,773,217.29	\$ 1,198,028.59	\$ 11,600,725.23	\$ 328,445.53	
3	\$ 833,329.53	\$ 367,406.63	\$ 18,289,162.33	\$ 4,333,113.75	\$ 8,922,803.32	\$ 19,366,357.32	\$ 347,420.64	\$ 1,851,144.59	\$ 1,743,235.35	\$ 1,177,772.06	\$ 11,404,577.70	\$ 322,892.10	
4	\$ 821,453.58	\$ 362,170.64	\$ 18,028,519.68	\$ 4,271,361.64	\$ 8,795,642.60	\$ 19,090,363.34	\$ 342,469.48	\$ 1,824,763.55	\$ 1,718,392.14	\$ 1,160,987.39	\$ 11,242,048.70	\$ 318,290.50	
5	\$ 810,342.13	\$ 357,271.71	\$ 17,784,655.64	\$ 4,213,584.77	\$ 8,676,667.72	\$ 18,832,136.20	\$ 337,837.04	\$ 1,800,080.76	\$ 1,695,148.19	\$ 1,145,283.21	\$ 11,089,982.34	\$ 313,985.12	
6	\$ 799,380.98	\$ 352,439.05	\$ 17,544,090.25	\$ 4,156,589.42	\$ 8,559,302.17	\$ 18,577,401.99	\$ 333,267.27	\$ 1,775,731.84	\$ 1,672,218.65	\$ 1,129,791.46	\$ 10,939,972.92	\$ 309,737.98	
7	\$ 788,568.09	\$ 347,671.76	\$ 17,306,778.88	\$ 4,100,365.02	\$ 8,443,524.17	\$ 18,326,113.46	\$ 328,759.30	\$ 1,751,712.28	\$ 1,649,599.27	\$ 1,114,509.26	\$ 10,791,992.61	\$ 305,548.29	
8	\$ 777,901.47	\$ 342,968.96	\$ 17,072,677.53	\$ 4,044,901.15	\$ 8,329,312.25	\$ 18,078,224.01	\$ 324,312.32	\$ 1,728,017.62	\$ 1,627,285.85	\$ 1,099,433.77	\$ 10,646,013.96	\$ 301,415.27	
9	\$ 767,379.13	\$ 338,329.76	\$ 16,841,742.76	\$ 3,990,187.51	\$ 8,216,645.22	\$ 17,833,687.64	\$ 319,925.48	\$ 1,704,643.47	\$ 1,605,274.25	\$ 1,084,562.20	\$ 10,502,009.91	\$ 297,338.15	
10	\$ 756,999.13	\$ 333,753.32	\$ 16,613,931.75	\$ 3,936,213.96	\$ 8,105,502.19	\$ 17,592,459.02	\$ 315,597.99	\$ 1,681,585.49	\$ 1,583,560.40	\$ 1,069,891.79	\$ 10,359,953.74	\$ 293,316.19	
11	\$ 746,759.52	\$ 329,238.78	\$ 16,389,202.23	\$ 3,882,970.49	\$ 7,995,862.55	\$ 17,354,493.39	\$ 311,329.03	\$ 1,658,839.40	\$ 1,562,140.26	\$ 1,055,419.83	\$ 10,219,819.10	\$ 289,348.62	
12	\$ 736,658.43	\$ 324,785.31	\$ 16,167,512.54	\$ 3,830,447.21	\$ 7,887,705.96	\$ 17,119,746.62	\$ 307,117.82	\$ 1,636,401.00	\$ 1,541,009.86	\$ 1,041,143.62	\$ 10,081,580.00	\$ 285,434.73	
13	\$ 726,693.97	\$ 320,392.08	\$ 15,948,821.55	\$ 3,778,634.40	\$ 7,781,012.35	\$ 16,888,175.17	\$ 302,963.57	\$ 1,614,266.10	\$ 1,520,165.28	\$ 1,027,060.52	\$ 9,945,210.80	\$ 281,573.78	
14	\$ 716,864.29	\$ 316,058.27	\$ 15,733,088.70	\$ 3,727,522.44	\$ 7,675,761.94	\$ 16,659,736.08	\$ 298,865.51	\$ 1,592,430.62	\$ 1,499,602.66	\$ 1,013,167.91	\$ 9,810,686.21	\$ 277,765.05	
15	\$ 707,167.58	\$ 311,783.09	\$ 15,520,273.97	\$ 3,677,101.84	\$ 7,571,935.21	\$ 16,434,387.00	\$ 294,822.88	\$ 1,570,890.50	\$ 1,479,318.18	\$ 999,463.22	\$ 9,677,981.27	\$ 274,007.84	
16	\$ 697,602.02	\$ 307,565.73	\$ 15,310,337.90	\$ 3,627,363.27	\$ 7,469,512.90	\$ 16,212,086.11	\$ 290,834.94	\$ 1,549,641.74	\$ 1,459,308.07	\$ 985,943.91	\$ 9,547,071.38	\$ 270,301.46	
17	\$ 688,165.86	\$ 303,405.42	\$ 15,103,241.54	\$ 3,578,297.49	\$ 7,368,476.01	\$ 15,992,792.19	\$ 286,900.94	\$ 1,528,680.40	\$ 1,439,568.64	\$ 972,607.47	\$ 9,417,932.25	\$ 266,645.20	
18	\$ 678,857.34	\$ 299,301.39	\$ 14,888,946.49	\$ 3,529,895.39	\$ 7,268,805.80	\$ 15,776,464.57	\$ 283,020.16	\$ 1,508,002.60	\$ 1,420,096.22	\$ 959,451.43	\$ 9,290,539.93	\$ 263,038.41	
19	\$ 669,674.73	\$ 295,252.87	\$ 14,697,414.84	\$ 3,482,148.02	\$ 7,170,483.79	\$ 15,563,063.11	\$ 279,191.86	\$ 1,487,604.49	\$ 1,400,887.18	\$ 946,473.81	\$ 9,164,870.79	\$ 259,480.40	
20	\$ 660,616.32	\$ 291,259.11	\$ 14,498,609.23	\$ 3,435,046.50	\$ 7,073,491.74	\$ 15,352,548.25	\$ 275,415.36	\$ 1,467,482.31	\$ 1,381,937.99	\$ 933,670.81	\$ 9,040,901.53	\$ 255,970.52	
21	\$ 651,680.45	\$ 287,319.37	\$ 14,302,492.78	\$ 3,388,582.10	\$ 6,977,811.66	\$ 15,144,880.93	\$ 271,689.93	\$ 1,447,632.30	\$ 1,363,245.10	\$ 921,041.44	\$ 8,918,608.14	\$ 252,508.12	
22	\$ 642,865.45	\$ 283,432.93	\$ 14,109,029.11	\$ 3,342,746.21	\$ 6,883,425.80	\$ 14,940,022.64	\$ 268,014.90	\$ 1,428,050.80	\$ 1,344,805.07	\$ 908,582.91	\$ 8,797,970.95	\$ 249,092.55	
23	\$ 634,169.69	\$ 279,599.05	\$ 13,918,182.34	\$ 3,297,530.32	\$ 6,790,316.66	\$ 14,737,935.37	\$ 264,389.58	\$ 1,408,734.17	\$ 1,326,614.47	\$ 896,292.90	\$ 8,678,964.58	\$ 245,723.18	
24	\$ 625,591.54	\$ 275,817.04	\$ 13,729,917.07	\$ 3,252,926.04	\$ 6,698,466.96	\$ 14,538,581.66	\$ 260,813.29	\$ 1,389,678.83	\$ 1,308,669.93	\$ 884,169.13	\$ 8,561,567.95	\$ 242,399.39	
25	\$ 617,129.44	\$ 272,086.18	\$ 13,544,198.39	\$ 3,208,925.11	\$ 6,607,859.68	\$ 14,341,924.52	\$ 257,285.38	\$ 1,370,881.25	\$ 1,290,968.12	\$ 872,209.36	\$ 8,445,759.31	\$ 239,120.56	
26	\$ 608,781.79	\$ 268,405.78	\$ 13,360,991.84	\$ 3,165,519.36	\$ 6,518,478.00	\$ 14,147,927.47	\$ 253,805.19	\$ 1,352,337.92	\$ 1,273,505.74	\$ 860,411.35	\$ 8,331,517.15	\$ 235,886.08	
27	\$ 600,547.06	\$ 264,775.18	\$ 13,180,263.45	\$ 3,122,700.74	\$ 6,430,305.35	\$ 13,956,554.54	\$ 250,372.08	\$ 1,334,045.43	\$ 1,256,279.58	\$ 848,772.94	\$ 8,218,820.30	\$ 232,695.35	
28	\$ 592,423.72	\$ 261,193.68	\$ 13,001,979.69	\$ 3,080,461.31	\$ 6,343,325.38	\$ 13,767,770.23	\$ 246,985.40	\$ 1,316,000.37	\$ 1,239,286.43	\$ 837,291.95	\$ 8,107,647.85	\$ 229,547.78	
29	\$ 584,410.26	\$ 257,660.62	\$ 12,826,107.50	\$ 3,038,793.23	\$ 6,257,521.94	\$ 13,581,539.52	\$ 243,644.54	\$ 1,298,199.40	\$ 1,222,523.13	\$ 825,962.77	\$ 7,997,979.19	\$ 226,442.78	
30	\$ 576,505.19	\$ 254,175.36	\$ 12,652,614.26	\$ 2,997,688.78	\$ 6,172,879.13	\$ 13,397,827.87	\$ 240,348.86	\$ 1,280,639.22	\$ 1,205,986.59	\$ 814,793.78	\$ 7,889,793.96	\$ 223,379.79	
31	\$ 568,707.06	\$ 250,737.24	\$ 12,481,467.78	\$ 2,957,140.34	\$ 6,089,381.25	\$ 13,216,601.21	\$ 237,097.77	\$ 1,263,316.56	\$ 1,189,673.72	\$ 803,772.41	\$ 7,783,072.11	\$ 220,358.23	
32	\$ 561,014.40	\$ 247,345.62	\$ 12,312,636.34	\$ 2,917,140.37	\$ 6,007,012.81	\$ 13,037,825.93	\$ 233,890.65	\$ 1,246,228.22	\$ 1,173,581.52	\$ 792,900.13	\$ 7,677,793.84	\$ 217,377.54	
33	\$ 553,425.80	\$ 243,999.88	\$ 12,146,088.60	\$ 2,877,681.47	\$ 5,925,758.53	\$ 12,861,468.87	\$ 230,726.91	\$ 1,229,371.03	\$ 1,157,706.99	\$ 782,174.91	\$ 7,573,939.62	\$ 214,437.16	
34	\$ 545,939.85	\$ 240,699.40	\$ 11,981,793.68	\$ 2,838,756.31	\$ 5,845,603.34	\$ 12,687,497.31	\$ 227,605.97	\$ 1,212,741.85	\$ 1,142,047.18	\$ 771,594.76	\$ 7,471,490.20	\$ 211,536.56	
35	\$ 538,555.15	\$ 237,443.56	\$ 11,819,721.11	\$ 2,800,357.67	\$ 5,766,532.38	\$ 12,515,878.99	\$ 224,527.24	\$ 1,196,337.62	\$ 1,126,599.20	\$ 761,157.73	\$ 7,370,426.56	\$ 208,675.20	
36	\$ 531,207.35	\$ 234,231.77	\$ 11,659,840.82	\$ 2,762,478.44	\$ 5,688,530.98	\$ 12,346,582.07	\$ 221,490.15	\$ 1,180,155.27	\$ 1,111,360.18	\$ 750,861.88	\$ 7,270,729.97	\$ 205,852.54	
37	\$ 524,084.08	\$ 231,063.41	\$ 11,502,123.17	\$ 2,725,111.58	\$ 5,611,584.66	\$ 12,179,575.16	\$ 218,494.15	\$ 1,164,191.82	\$ 1,096,327.29	\$ 740,705.29	\$ 7,172,381.93	\$ 203,068.06	
38	\$ 516,995.02	\$ 227,937.92	\$ 11,346,538.89	\$ 2,680,250.17	\$ 5,535,679.17	\$ 12,014,827.29	\$ 215,538.68	\$ 1,148,444.30	\$ 1,081,497.74	\$ 730,686.09	\$ 7,075,364.21	\$ 200,321.25	
39	\$ 510,001.85	\$ 224,854.70	\$ 11,193,059.14	\$ 2,651,887.36	\$ 5,460,800.42	\$ 11,852,307.89	\$ 212,623.18	\$ 1,132,909.78	\$ 1,066,868.78	\$ 720,802.41	\$ 6,979,658.80	\$ 197,611.59	
40	\$ 503,103.28	\$ 221,813.19	\$ 11,041,655.44	\$ 2,616,016.42	\$ 5,386,934.52	\$ 11,691,986.81	\$ 209,747.12	\$ 1,117,585.40	\$ 1,052,437.71	\$ 711,052.43	\$ 6,885,247.95	\$ 194,938.58	
41	\$ 496,298.02	\$ 218,812.82	\$ 10,892,299.72	\$ 2,580,630.69	\$ 5,314,067.77	\$ 11,533,834.33	\$ 206,909.96	\$ 1,102,468.30	\$ 1,038,201.84	\$ 701,434.33	\$ 6,792,114.16	\$ 192,301.73	
42	\$ 489,584.81	\$ 215,853.03	\$ 10,744,964.26	\$ 2,545,723.61	\$ 5,242,186.66	\$ 11,377,821.12	\$ 204,111.17	\$ 1,087,555.69	\$ 1,024,158.53	\$ 691,946.33	\$ 6,700,240.16	\$ 189,700.55	
43	\$ 482,962.40	\$ 212,933.28	\$ 10,599,621.75	\$ 2,511,288.70	\$ 5,171,277.86	\$ 11,223,918.22	\$ 201,350.25	\$ 1,072,844.79	\$ 1,010,305.17	\$ 682,586.67	\$ 6,609,608.89	\$ 187,134.55	
44	\$ 476,429.58	\$ 210,053.02	\$ 10,456,245.22	\$ 2,477,319.58	\$ 5,101,328.20	\$ 11,072,097.11	\$ 198,626.67	\$ 1,058,332.88	\$ 996,639.21	\$ 673,353.61	\$ 6,520,203.55	\$ 184,603.25	
45	\$ 469,985.12	\$ 207,211.72	\$ 10,314,808.09	\$ 2,443,809.94	\$ 5,032,324.73	\$ 10,922,329.61	\$ 195,939.93	\$ 1,044,017.27	\$ 983,158.10	\$ 964,245.45	\$ 6,432,007.56	\$ 182,106.21	
46	\$ 463,627.83	\$ 204,408.86	\$ 10,175,284.12	\$ 2,410,753.58	\$ 4,964,254.64	\$ 10,774,587.95	\$ 193,289.54	\$ 1,029,895.29	\$ 969,859.34	\$ 955,260.49	\$ 6,345,004.56	\$ 179,642.94	
47	\$ 457,356.54	\$ 201,643.91	\$ 10,037,647.42	\$ 2,378,144.35	\$ 4,897,105.30	\$ 10,628,844.73	\$ 190,674.99	\$ 1,015,964.34	\$ 956,740.47	\$ 946,397.06	\$ 6,259,178.41	\$ 177,212.99	
48	\$ 451,170.07	\$ 198,916.36	\$ 9,901,872.48	\$ 2,345,976.21	\$ 4,830,864.26	\$ 10,485,072.92	\$ 188,095.82	\$ 1,002,221.83	\$ 943,799.06	\$ 937,653.52	\$ 6,174,513.20	\$ 174,815.90	
49	\$ 445,067.29	\$ 196,225.70	\$ 9,767,934.11	\$ 2,314,243.20	\$ 4,765,519.24	\$ 10,343,245.85	\$ 185,551.52	\$ 988,665.21	\$ 931,032.69	\$ 929,028.26	\$ 6,090,993.21	\$ 172,451.24	
50	\$ 439,047.06	\$ 193,571.44	\$ 9,635,807.47	\$ 2,282,939.43	\$ 4,701,058.11	\$ 10,203,337.21	\$ 183,041.65	\$ 975,291.96	\$ 918,439.01	\$ 920,519.66	\$ 6,008,602.96	\$ 170,118.57	
Total	\$ 31,254,320.15	\$ 13,779,716.21	\$ 685,941,533.92	\$ 162,514,971.32	\$ 334,652,910.15	\$ 726,342,115.08	\$ 13,030,134.71	\$ 69,427,836.00	\$ 65,380,661.46	\$ 44,172,759.91	\$ 427,732,740.53	\$ 12,110,183.07	
		AETC NPV =	\$ 2,586,339,882.52										

Moves Privatization

Discounted Total Moves Cost (Privatization)													
Year	Altus	Columbus	Pt Sam	Goodfellow	Keesler	Lackland	Laughlin	Luke	Maxwell	Randolph	Sheppard	Vance	
1	\$ 2,075,099.75	\$ 1,040,395.89	\$ 21,514,546.34	\$ 5,260,555.38	\$ 10,775,670.45	\$ 21,898,532.03	\$ 1,028,584.91	\$ 3,006,714.45	\$ 2,913,163.19	\$ 3,225,313.86	\$ 12,948,188.70	\$ 955,964.91	
2	\$ 2,080,209.19	\$ 793,942.09	\$ 19,404,271.05	\$ 5,188,927.90	\$ 10,406,541.28	\$ 21,574,755.65	\$ 353,395.94	\$ 3,049,848.60	\$ 4,617,717.13	\$ 2,652,890.80	\$ 18,097,490.72	\$ 328,445.53	
3	\$ 833,329.53	\$ 367,406.63	\$ 19,113,482.14	\$ 4,922,272.64	\$ 10,405,376.25	\$ 23,624,583.09	\$ 347,420.64	\$ 3,025,082.28	\$ 2,859,406.02	\$ 1,177,772.06	\$ 15,343,953.98	\$ 322,892.10	
4	\$ 821,453.58	\$ 362,170.64	\$ 18,806,232.02	\$ 5,118,882.30	\$ 10,339,459.11	\$ 23,299,530.12	\$ 342,469.48	\$ 2,665,984.64	\$ 1,718,392.14	\$ 1,160,987.39	\$ 12,916,014.80	\$ 318,290.50	
5	\$ 810,342.13	\$ 357,271.71	\$ 18,551,848.20	\$ 5,095,219.07	\$ 10,199,741.34	\$ 21,067,311.15	\$ 337,837.04	\$ 2,834,787.00	\$ 1,695,148.19	\$ 1,145,283.21	\$ 15,111,153.64	\$ 313,985.12	
6	\$ 799,380.98	\$ 352,439.05	\$ 18,300,922.55	\$ 7,332,801.97	\$ 13,453,958.49	\$ 26,633,478.96	\$ 333,267.27	\$ 1,775,731.84	\$ 1,672,218.65	\$ 1,129,791.46	\$ 11,897,950.99	\$ 309,737.98	
7	\$ 788,568.09	\$ 347,671.76	\$ 19,302,630.65	\$ 5,754,557.57	\$ 13,271,972.58	\$ 28,818,498.13	\$ 328,759.30	\$ 1,751,712.28	\$ 1,649,599.27	\$ 1,114,509.26	\$ 13,990,896.59	\$ 305,548.29	
8	\$ 777,901.47	\$ 342,968.96	\$ 17,288,778.49	\$ 5,728,950.36	\$ 13,092,448.31	\$ 19,726,027.38	\$ 324,312.32	\$ 1,728,017.62	\$ 1,627,285.85	\$ 1,099,433.77	\$ 14,515,404.30	\$ 301,415.27	
9	\$ 767,379.13	\$ 338,329.76	\$ 23,185,850.42	\$ 5,509,493.03	\$ 13,783,243.18	\$ 20,893,623.08	\$ 319,925.48	\$ 1,704,643.47	\$ 1,605,274.25	\$ 1,084,562.20	\$ 12,824,071.57	\$ 297,338.15	
10	\$ 756,999.13	\$ 333,753.32	\$ 22,470,389.78	\$ 5,396,213.96	\$ 8,105,502.19	\$ 19,862,645.94	\$ 315,597.99	\$ 1,681,585.49	\$ 1,583,560.40	\$ 1,069,891.79	\$ 12,469,044.40	\$ 293,316.19	
11	\$ 746,759.52	\$ 329,238.78	\$ 26,883,457.90	\$ 3,882,970.49	\$ 7,995,862.55	\$ 18,900,569.80	\$ 311,329.03	\$ 1,658,839.40	\$ 1,562,140.26	\$ 1,055,419.83	\$ 11,981,742.33	\$ 289,348.62	
12	\$ 736,658.43	\$ 324,785.31	\$ 20,645,774.50	\$ 3,830,447.21	\$ 7,887,705.96	\$ 23,500,975.54	\$ 307,117.82	\$ 1,636,401.00	\$ 1,541,009.86	\$ 1,041,143.62	\$ 10,081,580.00	\$ 285,434.73	
13	\$ 726,693.97	\$ 320,392.08	\$ 21,846,305.98	\$ 3,778,634.40	\$ 7,781,012.35	\$ 18,448,311.67	\$ 302,963.57	\$ 1,614,266.10	\$ 1,520,165.28	\$ 1,027,060.52	\$ 9,945,210.80	\$ 281,573.78	
14	\$ 716,864.29	\$ 316,058.27	\$ 19,150,698.16	\$ 3,727,522.44	\$ 7,675,761.94	\$ 17,988,783.91	\$ 298,865.51	\$ 1,592,430.62	\$ 1,499,602.66	\$ 1,013,167.91	\$ 9,810,686.21	\$ 277,765.05	
15	\$ 707,167.58	\$ 311,783.09	\$ 15,899,683.86	\$ 3,677,101.84	\$ 7,571,935.21	\$ 17,744,573.82	\$ 294,822.88	\$ 1,570,890.50	\$ 1,479,318.18	\$ 999,463.22	\$ 9,677,981.27	\$ 274,007.84	
16	\$ 697,602.02	\$ 307,565.73	\$ 15,310,337.90	\$ 3,627,363.27	\$ 7,469,512.90	\$ 16,212,086.11	\$ 290,834.94	\$ 1,549,641.74	\$ 1,459,308.07	\$ 985,943.91	\$ 9,547,071.38	\$ 270,301.46	
17	\$ 688,165.86	\$ 303,405.42	\$ 15,103,241.54	\$ 3,578,297.49	\$ 7,368,476.01	\$ 15,992,792.19	\$ 286,900.94	\$ 1,528,680.40	\$ 1,439,568.64	\$ 972,607.47	\$ 9,417,932.25	\$ 266,645.20	
18	\$ 678,857.34	\$ 299,301.39	\$ 14,898,946.49	\$ 3,529,895.39	\$ 7,268,805.80	\$ 15,776,464.57	\$ 283,020.16	\$ 1,508,002.60	\$ 1,420,096.22	\$ 959,451.43	\$ 9,290,539.93	\$ 263,038.41	
19	\$ 669,674.73	\$ 295,252.87	\$ 14,697,414.84	\$ 3,482,148.02	\$ 7,170,483.79	\$ 15,563,063.11	\$ 279,191.86	\$ 1,487,604.49	\$ 1,400,887.18	\$ 946,473.34	\$ 9,164,870.79	\$ 259,480.40	
20	\$ 660,616.32	\$ 291,259.11	\$ 14,498,609.23	\$ 3,435,046.50	\$ 7,073,491.74	\$ 15,352,548.25	\$ 275,415.36	\$ 1,467,482.31	\$ 1,381,937.99	\$ 933,670.81	\$ 9,040,901.53	\$ 255,970.52	
21	\$ 651,680.45	\$ 287,319.37	\$ 14,302,492.78	\$ 3,388,582.10	\$ 6,977,811.66	\$ 15,144,880.93	\$ 271,689.93	\$ 1,447,632.30	\$ 1,363,245.10	\$ 921,041.44	\$ 8,918,608.14	\$ 252,508.12	
22	\$ 642,865.45	\$ 283,432.93	\$ 14,109,029.11	\$ 3,342,746.21	\$ 6,883,425.80	\$ 14,940,022.64	\$ 268,014.90	\$ 1,428,050.80	\$ 1,344,805.07	\$ 908,582.91	\$ 8,797,970.95	\$ 249,092.55	
23	\$ 634,169.69	\$ 279,599.05	\$ 13,918,182.34	\$ 3,297,530.32	\$ 6,790,316.66	\$ 14,737,935.37	\$ 264,389.58	\$ 1,408,734.17	\$ 1,326,614.47	\$ 896,292.90	\$ 8,678,964.58	\$ 245,723.18	
24	\$ 625,591.54	\$ 275,817.04	\$ 13,729,917.07	\$ 3,252,926.04	\$ 6,698,466.96	\$ 14,538,581.66	\$ 260,813.29	\$ 1,389,678.83	\$ 1,308,669.93	\$ 884,169.13	\$ 8,561,567.95	\$ 242,399.39	
25	\$ 617,129.44	\$ 272,086.18	\$ 13,544,198.39	\$ 3,208,925.11	\$ 6,607,859.68	\$ 14,341,924.52	\$ 257,285.38	\$ 1,370,881.25	\$ 1,290,968.12	\$ 872,209.36	\$ 8,445,759.31	\$ 239,120.56	
26	\$ 608,781.79	\$ 268,405.78	\$ 13,360,991.84	\$ 3,165,519.36	\$ 6,518,478.00	\$ 14,147,927.47	\$ 253,805.19	\$ 1,352,337.92	\$ 1,273,505.74	\$ 860,411.35	\$ 8,331,517.15	\$ 235,886.08	
27	\$ 600,547.06	\$ 264,775.18	\$ 13,180,263.45	\$ 3,122,700.74	\$ 6,430,305.35	\$ 13,956,554.54	\$ 250,372.08	\$ 1,334,045.43	\$ 1,256,279.58	\$ 848,772.94	\$ 8,218,820.30	\$ 232,695.35	
28	\$ 592,423.72	\$ 261,193.68	\$ 13,001,979.69	\$ 3,080,461.31	\$ 6,343,325.38	\$ 13,767,770.23	\$ 246,985.40	\$ 1,316,000.37	\$ 1,239,286.43	\$ 837,291.95	\$ 8,107,647.85	\$ 229,547.78	
29	\$ 584,410.26	\$ 257,660.62	\$ 12,826,107.50	\$ 3,038,793.23	\$ 6,257,521.94	\$ 13,581,539.52	\$ 244,644.54	\$ 1,298,199.40	\$ 1,222,523.13	\$ 825,962.97	\$ 7,997,979.19	\$ 226,442.78	
30	\$ 576,505.19	\$ 254,175.36	\$ 12,652,614.26	\$ 2,997,688.78	\$ 6,172,873.13	\$ 13,397,827.87	\$ 240,348.86	\$ 1,280,639.22	\$ 1,205,986.59	\$ 814,793.78	\$ 7,889,793.96	\$ 223,379.79	
31	\$ 568,707.06	\$ 250,737.24	\$ 12,481,467.78	\$ 2,957,140.34	\$ 6,089,381.25	\$ 13,216,601.21	\$ 237,097.77	\$ 1,263,316.56	\$ 1,189,673.72	\$ 803,772.41	\$ 7,783,072.11	\$ 220,358.23	
32	\$ 561,014.40	\$ 247,345.62	\$ 12,312,636.34	\$ 2,917,140.37	\$ 6,007,012.81	\$ 13,037,825.93	\$ 233,890.65	\$ 1,246,228.22	\$ 1,173,581.52	\$ 792,900.13	\$ 7,677,793.84	\$ 217,377.54	
33	\$ 553,425.80	\$ 243,999.88	\$ 12,146,088.60	\$ 2,877,681.47	\$ 5,925,758.53	\$ 12,861,468.87	\$ 230,726.91	\$ 1,229,371.03	\$ 1,157,706.99	\$ 782,174.91	\$ 7,573,939.62	\$ 214,437.16	
34	\$ 545,939.85	\$ 240,699.40	\$ 11,981,793.68	\$ 2,838,756.31	\$ 5,845,603.34	\$ 12,687,497.31	\$ 227,605.97	\$ 1,212,741.85	\$ 1,142,047.18	\$ 771,594.76	\$ 7,471,490.20	\$ 211,536.56	
35	\$ 538,555.15	\$ 237,443.56	\$ 11,819,721.11	\$ 2,800,357.67	\$ 5,766,532.38	\$ 12,515,878.99	\$ 224,527.24	\$ 1,196,337.62	\$ 1,126,599.20	\$ 761,157.73	\$ 7,370,426.56	\$ 208,675.20	
36	\$ 531,270.35	\$ 234,231.77	\$ 11,659,840.82	\$ 2,762,478.44	\$ 5,688,530.98	\$ 12,346,582.07	\$ 221,490.15	\$ 1,180,155.27	\$ 1,111,360.18	\$ 750,861.88	\$ 7,270,729.97	\$ 205,852.54	
37	\$ 524,084.08	\$ 231,063.41	\$ 11,502,123.17	\$ 2,725,111.58	\$ 5,611,584.66	\$ 12,179,575.16	\$ 218,494.15	\$ 1,164,191.82	\$ 1,096,327.29	\$ 740,705.29	\$ 7,172,381.93	\$ 203,068.06	
38	\$ 516,995.02	\$ 227,937.92	\$ 11,354,538.89	\$ 2,688,250.17	\$ 5,535,679.17	\$ 12,014,827.29	\$ 215,538.68	\$ 1,148,444.30	\$ 1,081,497.74	\$ 730,686.09	\$ 7,075,364.21	\$ 200,321.25	
39	\$ 510,001.85	\$ 224,854.70	\$ 11,193,059.14	\$ 2,651,887.36	\$ 5,460,800.42	\$ 11,852,307.89	\$ 212,623.18	\$ 1,132,909.78	\$ 1,066,868.78	\$ 720,802.41	\$ 6,979,658.80	\$ 197,611.59	
40	\$ 503,103.28	\$ 221,813.19	\$ 11,041,655.44	\$ 2,616,016.42	\$ 5,386,934.52	\$ 11,691,986.81	\$ 209,747.12	\$ 1,117,585.40	\$ 1,052,437.71	\$ 711,052.43	\$ 6,885,247.95	\$ 194,938.58	
41	\$ 496,298.02	\$ 218,812.82	\$ 10,892,299.72	\$ 2,580,630.69	\$ 5,314,067.77	\$ 11,533,834.33	\$ 206,909.96	\$ 1,102,468.30	\$ 1,038,201.84	\$ 701,434.33	\$ 6,792,114.16	\$ 192,301.73	
42	\$ 489,584.81	\$ 215,853.03	\$ 10,744,964.26	\$ 2,545,723.61	\$ 5,242,186.66	\$ 11,377,821.12	\$ 204,111.17	\$ 1,087,555.69	\$ 1,024,158.53	\$ 691,946.33	\$ 6,700,240.16	\$ 189,700.55	
43	\$ 482,962.40	\$ 212,933.28	\$ 10,599,621.75	\$ 2,511,288.70	\$ 5,171,277.86	\$ 11,223,918.22	\$ 201,350.25	\$ 1,072,844.79	\$ 1,010,305.17	\$ 682,586.67	\$ 6,609,608.89	\$ 187,134.55	
44	\$ 476,429.58	\$ 210,053.02	\$ 10,456,245.22	\$ 2,477,319.58	\$ 5,101,328.20	\$ 11,072,097.11	\$ 198,626.67	\$ 1,058,332.88	\$ 996,639.21	\$ 673,353.61	\$ 6,520,203.55	\$ 184,603.25	
45	\$ 469,985.12	\$ 207,211.72	\$ 10,314,809.09	\$ 2,443,809.94	\$ 5,032,324.73	\$ 10,922,329.61	\$ 195,939.93	\$ 1,044,017.27	\$ 983,158.10	\$ 664,245.45	\$ 6,432,007.56	\$ 182,106.21	
46	\$ 463,627.83	\$ 204,408.86	\$ 10,175,284.12	\$ 2,410,753.58	\$ 4,964,254.64	\$ 10,774,587.95	\$ 193,289.54	\$ 1,029,895.29	\$ 969,859.34	\$ 655,260.49	\$ 6,345,004.56	\$ 179,642.94	
47	\$ 457,356.54	\$ 201,643.91	\$ 10,037,647.42	\$ 2,378,144.35	\$ 4,897,105.30	\$ 10,628,844.73	\$ 190,674.99	\$ 1,015,964.34	\$ 956,740.47	\$ 646,397.06	\$ 6,259,178.41	\$ 177,212.99	
48	\$ 451,170.07	\$ 198,916.36	\$ 9,901,872.48	\$ 2,345,976.21	\$ 4,830,864.26	\$ 10,485,072.92	\$ 188,095.82	\$ 1,002,221.83	\$ 943,799.06	\$ 637,653.52	\$ 6,174,513.20	\$ 174,815.90	
49	\$ 445,067.29	\$ 196,225.70	\$ 9,767,934.11	\$ 2,314,243.20	\$ 4,765,519.24	\$ 10,343,245.85	\$ 185,551.52	\$ 988,665.21	\$ 931,032.69	\$ 629,028.26	\$ 6,090,993.21	\$ 172,451.24	
50	\$ 439,047.06	\$ 193,571.44	\$ 9,635,807.47	\$ 2,282,939.43	\$ 4,701,058.11	\$ 10,203,337.21	\$ 183,041.65	\$ 975,291.96	\$ 918,439.01	\$ 620,519.66	\$ 6,008,602.96	\$ 170,118.57	
Total	\$ 33,698,453.19	\$ 14,859,613.90	\$ 731,510,608.09	\$ 174,418,823.86	\$ 359,115,156.84	\$ 778,403,759.80	\$ 13,698,714.90	\$ 74,733,085.89	\$ 70,448,117.32	\$ 47,632,503.31	\$ 459,213,888.42	\$ 12,731,560.26	
		AETC NPV =	\$ 2,770,464,285.78										

Moves Identical FSRM

Discounted Total Moves Cost (FSRM)													
Year	Altus	Columbus	Ft Sam	Goodfellow	Keesler	Lackland	Laughlin	Luke	Maxwell	Randolph	Sheppard	Vance	
1	\$ 2,075,099.75	\$ 1,040,395.89	\$ 21,514,546.34	\$ 5,260,555.38	\$ 10,775,670.45	\$ 21,898,532.03	\$ 1,028,584.91	\$ 3,006,714.45	\$ 2,913,163.19	\$ 3,225,313.86	\$ 12,948,188.70	\$ 955,964.91	
2	\$ 2,080,209.19	\$ 793,942.09	\$ 19,404,271.05	\$ 5,188,927.90	\$ 10,406,541.28	\$ 21,574,755.65	\$ 353,395.94	\$ 3,049,848.60	\$ 4,617,717.13	\$ 2,652,890.80	\$ 18,097,490.72	\$ 328,445.53	
3	\$ 833,329.53	\$ 367,406.63	\$ 19,113,482.14	\$ 4,922,272.64	\$ 10,405,376.25	\$ 23,624,583.09	\$ 347,420.64	\$ 3,025,082.28	\$ 2,859,406.02	\$ 1,177,772.06	\$ 15,343,953.98	\$ 322,892.10	
4	\$ 821,453.58	\$ 362,170.64	\$ 18,806,232.02	\$ 5,118,882.30	\$ 10,339,459.11	\$ 23,299,530.12	\$ 342,469.48	\$ 2,665,984.64	\$ 1,718,392.14	\$ 1,160,987.39	\$ 12,916,014.80	\$ 318,290.50	
5	\$ 810,342.13	\$ 357,271.71	\$ 18,551,848.20	\$ 5,095,219.07	\$ 10,199,741.34	\$ 21,067,311.15	\$ 337,837.04	\$ 2,834,787.00	\$ 1,695,148.19	\$ 1,145,283.21	\$ 15,111,153.64	\$ 313,985.12	
6	\$ 799,380.98	\$ 352,439.05	\$ 18,300,922.55	\$ 7,332,801.97	\$ 13,453,958.49	\$ 26,633,478.96	\$ 333,267.20	\$ 1,775,731.84	\$ 1,672,218.65	\$ 1,129,791.46	\$ 11,897,950.99	\$ 309,737.98	
7	\$ 788,568.09	\$ 347,671.96	\$ 19,302,630.65	\$ 5,754,557.57	\$ 13,271,972.58	\$ 28,818,498.13	\$ 328,759.30	\$ 1,751,712.28	\$ 1,649,599.27	\$ 1,114,509.26	\$ 13,990,896.59	\$ 305,548.29	
8	\$ 777,901.47	\$ 342,968.96	\$ 17,288,778.49	\$ 5,789,956.36	\$ 13,092,448.31	\$ 19,726,027.38	\$ 324,312.32	\$ 1,728,017.62	\$ 1,627,285.85	\$ 1,099,433.77	\$ 14,515,404.30	\$ 301,415.27	
9	\$ 767,379.13	\$ 338,329.76	\$ 23,185,850.42	\$ 5,509,493.03	\$ 10,783,243.18	\$ 20,893,623.08	\$ 319,925.48	\$ 1,704,643.47	\$ 1,605,274.25	\$ 1,084,562.20	\$ 12,824,071.57	\$ 297,338.15	
10	\$ 756,999.13	\$ 333,753.32	\$ 22,470,389.78	\$ 3,936,213.96	\$ 8,105,502.19	\$ 19,862,645.94	\$ 315,597.99	\$ 1,681,585.49	\$ 1,583,560.40	\$ 1,069,891.79	\$ 12,469,044.40	\$ 293,316.19	
11	\$ 746,759.52	\$ 329,238.78	\$ 26,883,457.90	\$ 3,882,970.49	\$ 7,995,862.55	\$ 18,900,569.80	\$ 311,329.03	\$ 1,658,839.40	\$ 1,562,140.26	\$ 1,055,419.83	\$ 11,981,742.33	\$ 289,348.62	
12	\$ 736,658.43	\$ 324,785.31	\$ 20,645,774.50	\$ 3,830,447.21	\$ 7,887,705.96	\$ 23,500,975.54	\$ 307,117.82	\$ 1,636,401.00	\$ 1,541,009.86	\$ 1,041,143.62	\$ 10,081,580.00	\$ 285,434.73	
13	\$ 726,693.97	\$ 320,392.08	\$ 21,846,305.98	\$ 3,778,634.40	\$ 7,781,012.35	\$ 18,448,311.67	\$ 302,963.57	\$ 1,614,266.10	\$ 1,520,165.28	\$ 1,027,060.52	\$ 9,945,210.80	\$ 281,573.78	
14	\$ 716,864.29	\$ 316,058.27	\$ 19,150,698.16	\$ 3,727,522.44	\$ 7,675,761.94	\$ 17,988,783.91	\$ 298,865.51	\$ 1,592,430.62	\$ 1,499,602.66	\$ 1,013,167.91	\$ 9,810,686.21	\$ 277,765.05	
15	\$ 707,167.58	\$ 311,783.09	\$ 15,899,683.86	\$ 3,677,101.84	\$ 7,571,935.21	\$ 17,744,573.82	\$ 294,822.88	\$ 1,570,890.50	\$ 1,479,318.18	\$ 999,463.22	\$ 9,677,981.27	\$ 274,007.84	
16	\$ 697,602.02	\$ 307,565.73	\$ 15,310,337.90	\$ 3,627,363.27	\$ 7,469,512.90	\$ 16,122,086.11	\$ 290,834.94	\$ 1,549,641.74	\$ 1,459,308.07	\$ 985,943.91	\$ 9,547,071.38	\$ 270,301.46	
17	\$ 688,165.86	\$ 303,405.42	\$ 15,103,241.54	\$ 3,578,297.49	\$ 7,368,476.01	\$ 15,992,792.19	\$ 286,900.94	\$ 1,528,680.40	\$ 1,439,568.64	\$ 972,607.47	\$ 9,417,932.25	\$ 266,645.20	
18	\$ 678,857.34	\$ 299,301.39	\$ 14,898,946.49	\$ 3,529,895.39	\$ 7,268,805.80	\$ 15,776,464.57	\$ 283,020.16	\$ 1,508,002.60	\$ 1,420,096.22	\$ 959,451.43	\$ 9,290,539.93	\$ 263,038.41	
19	\$ 669,674.73	\$ 295,252.87	\$ 14,697,414.84	\$ 3,482,148.02	\$ 7,170,483.79	\$ 15,563,063.11	\$ 279,191.86	\$ 1,487,604.49	\$ 1,400,887.18	\$ 946,473.34	\$ 9,164,870.79	\$ 259,480.40	
20	\$ 660,616.32	\$ 291,259.11	\$ 14,498,609.23	\$ 3,435,046.50	\$ 7,073,491.74	\$ 15,352,548.25	\$ 275,415.36	\$ 1,467,482.31	\$ 1,381,937.99	\$ 933,670.81	\$ 9,040,901.53	\$ 255,970.52	
21	\$ 651,680.45	\$ 287,319.37	\$ 14,302,492.78	\$ 3,388,582.10	\$ 6,977,811.66	\$ 15,144,880.93	\$ 271,689.93	\$ 1,447,632.30	\$ 1,363,245.10	\$ 921,041.44	\$ 8,918,609.14	\$ 252,508.12	
22	\$ 642,865.45	\$ 283,432.93	\$ 14,109,029.11	\$ 3,342,746.21	\$ 6,883,425.80	\$ 14,940,022.64	\$ 268,014.90	\$ 1,428,050.80	\$ 1,344,805.07	\$ 908,582.91	\$ 8,797,970.95	\$ 249,092.55	
23	\$ 634,169.69	\$ 279,599.05	\$ 13,918,182.34	\$ 3,297,530.32	\$ 6,790,316.66	\$ 14,737,935.37	\$ 264,389.58	\$ 1,408,734.17	\$ 1,326,614.47	\$ 896,292.90	\$ 8,678,964.58	\$ 245,723.18	
24	\$ 625,591.54	\$ 275,817.04	\$ 13,729,917.07	\$ 3,252,926.04	\$ 6,698,466.96	\$ 14,538,581.66	\$ 260,813.29	\$ 1,389,678.83	\$ 1,308,669.93	\$ 884,169.13	\$ 8,561,567.95	\$ 242,399.39	
25	\$ 617,129.44	\$ 272,086.18	\$ 13,544,198.39	\$ 3,208,915.11	\$ 6,607,859.68	\$ 14,341,924.52	\$ 257,285.38	\$ 1,370,881.25	\$ 1,290,968.12	\$ 872,209.36	\$ 8,445,759.31	\$ 239,120.66	
26	\$ 608,781.79	\$ 268,405.78	\$ 13,360,991.84	\$ 3,165,529.36	\$ 6,518,478.00	\$ 14,147,927.47	\$ 253,805.19	\$ 1,352,337.92	\$ 1,273,505.74	\$ 860,411.35	\$ 8,331,517.15	\$ 235,886.08	
27	\$ 600,547.06	\$ 264,775.18	\$ 13,180,263.45	\$ 3,122,700.74	\$ 6,430,305.35	\$ 13,956,554.54	\$ 250,372.08	\$ 1,334,045.43	\$ 1,256,279.58	\$ 848,772.94	\$ 8,218,820.30	\$ 232,695.35	
28	\$ 592,423.72	\$ 261,193.68	\$ 13,001,979.69	\$ 3,080,461.31	\$ 6,343,325.38	\$ 13,767,770.23	\$ 246,985.40	\$ 1,316,000.37	\$ 1,239,286.43	\$ 837,291.95	\$ 8,107,647.85	\$ 229,547.78	
29	\$ 584,410.26	\$ 257,660.62	\$ 12,826,107.50	\$ 3,038,793.23	\$ 6,257,521.94	\$ 13,581,539.52	\$ 243,644.54	\$ 1,298,199.40	\$ 1,222,523.13	\$ 825,966.27	\$ 7,997,979.19	\$ 226,442.78	
30	\$ 576,505.19	\$ 254,175.36	\$ 12,652,614.26	\$ 2,997,688.78	\$ 6,172,879.13	\$ 13,397,827.87	\$ 240,348.86	\$ 1,280,639.22	\$ 1,205,986.59	\$ 814,793.78	\$ 7,889,793.96	\$ 223,379.79	
31	\$ 1,366,652.97	\$ 685,200.86	\$ 14,169,400.14	\$ 3,464,582.19	\$ 7,096,816.45	\$ 14,422,291.68	\$ 914,519.96	\$ 1,980,210.94	\$ 1,918,598.43	\$ 2,124,179.70	\$ 8,527,628.88	\$ 849,953.16	
32	\$ 1,376,760.24	\$ 525,460.57	\$ 12,842,472.33	\$ 3,434,226.56	\$ 6,887,438.24	\$ 13,678,980.21	\$ 233,890.65	\$ 2,018,503.87	\$ 3,056,177.91	\$ 1,755,782.35	\$ 11,977,596.22	\$ 127,377.54	
33	\$ 553,425.80	\$ 243,999.88	\$ 12,693,530.92	\$ 3,130,955.13	\$ 6,910,355.96	\$ 15,489,416.18	\$ 230,726.91	\$ 2,008,999.47	\$ 1,898,971.55	\$ 1,782,174.91	\$ 10,190,134.53	\$ 214,437.51	
34	\$ 545,939.85	\$ 240,699.40	\$ 12,498,663.01	\$ 3,402,020.39	\$ 6,871,627.18	\$ 15,484,918.77	\$ 227,605.97	\$ 1,771,819.24	\$ 1,142,047.18	\$ 771,594.76	\$ 8,584,011.74	\$ 211,536.56	
35	\$ 538,555.15	\$ 237,443.56	\$ 12,329,598.97	\$ 3,386,293.76	\$ 6,778,770.44	\$ 14,001,381.15	\$ 224,527.24	\$ 1,884,005.65	\$ 1,126,599.20	\$ 761,157.73	\$ 10,042,905.82	\$ 208,675.20	
36	\$ 531,270.35	\$ 234,231.77	\$ 12,162,833.23	\$ 4,873,396.26	\$ 8,941,530.29	\$ 17,700,668.48	\$ 221,490.15	\$ 1,180,155.27	\$ 1,111,360.18	\$ 750,861.88	\$ 7,907,404.30	\$ 205,852.54	
37	\$ 524,084.08	\$ 231,063.41	\$ 12,579,962.63	\$ 3,824,491.57	\$ 8,820,582.06	\$ 19,152,837.01	\$ 218,494.15	\$ 1,164,191.82	\$ 1,096,327.29	\$ 740,705.29	\$ 9,298,380.53	\$ 203,068.06	
38	\$ 516,995.02	\$ 227,937.92	\$ 11,490,160.07	\$ 3,431,224.69	\$ 8,701,269.84	\$ 13,109,961.02	\$ 215,538.68	\$ 1,148,444.30	\$ 1,081,497.74	\$ 730,686.09	\$ 9,646,969.50	\$ 200,321.25	
39	\$ 510,001.85	\$ 224,854.70	\$ 15,409,366.99	\$ 3,661,621.14	\$ 7,166,567.05	\$ 13,885,947.68	\$ 212,623.18	\$ 1,132,908.78	\$ 1,066,868.78	\$ 720,802.41	\$ 1,052,906.07	\$ 197,611.29	
40	\$ 503,103.28	\$ 221,813.19	\$ 14,933,870.28	\$ 2,616,016.42	\$ 5,386,934.52	\$ 13,200,758.02	\$ 209,747.12	\$ 1,117,585.40	\$ 1,052,437.71	\$ 711,052.43	\$ 8,286,954.23	\$ 194,938.58	
41	\$ 496,298.02	\$ 218,812.82	\$ 17,931,082.72	\$ 2,580,630.69	\$ 5,314,067.77	\$ 12,561,360.11	\$ 206,909.96	\$ 1,102,468.30	\$ 1,038,201.84	\$ 701,434.33	\$ 7,963,092.20	\$ 192,301.73	
42	\$ 489,594.81	\$ 215,853.03	\$ 14,076,915.50	\$ 2,545,723.61	\$ 5,242,186.66	\$ 15,618,799.84	\$ 204,111.17	\$ 1,087,555.69	\$ 1,024,158.53	\$ 691,946.33	\$ 6,700,240.16	\$ 189,700.55	
43	\$ 482,962.40	\$ 212,933.28	\$ 14,874,371.54	\$ 2,511,288.70	\$ 5,171,277.86	\$ 12,260,788.36	\$ 201,350.25	\$ 1,072,844.79	\$ 1,010,305.17	\$ 682,586.67	\$ 6,609,608.89	\$ 187,134.55	
44	\$ 476,429.58	\$ 210,053.02	\$ 13,077,516.70	\$ 2,477,319.58	\$ 5,101,328.20	\$ 11,955,385.20	\$ 198,626.67	\$ 1,058,332.88	\$ 996,639.21	\$ 673,353.61	\$ 6,520,203.55	\$ 184,603.26	
45	\$ 469,985.12	\$ 207,211.72	\$ 10,918,626.17	\$ 2,443,809.94	\$ 5,032,324.73	\$ 11,793,082.64	\$ 195,399.93	\$ 1,044,017.27	\$ 983,158.10	\$ 664,245.45	\$ 6,432,007.56	\$ 182,106.21	
46	\$ 463,627.83	\$ 204,408.86	\$ 10,175,284.12	\$ 2,410,753.58	\$ 4,964,254.64	\$ 10,774,587.95	\$ 193,289.54	\$ 1,029,895.29	\$ 969,859.34	\$ 655,260.49	\$ 6,345,004.56	\$ 179,642.94	
47	\$ 457,356.54	\$ 201,643.91	\$ 10,037,647.42	\$ 2,378,144.35	\$ 4,897,105.30	\$ 10,628,844.73	\$ 190,674.99	\$ 1,015,964.34	\$ 956,740.47	\$ 646,397.06	\$ 6,259,178.41	\$ 177,212.99	
48	\$ 451,170.07	\$ 198,916.36	\$ 9,901,872.48	\$ 2,345,976.21	\$ 4,830,864.26	\$ 10,485,072.92	\$ 188,095.82	\$ 1,002,221.83	\$ 943,799.06	\$ 637,653.52	\$ 6,174,513.20	\$ 174,815.90	
49	\$ 445,067.29	\$ 196,225.70	\$ 9,767,934.11	\$ 2,314,243.20	\$ 4,765,513.24	\$ 10,343,245.85	\$ 185,551.52	\$ 988,665.21	\$ 931,032.69	\$ 629,028.26	\$ 6,090,993.21	\$ 172,451.24	
50	\$ 439,047.06	\$ 193,571.44	\$ 9,635,807.47	\$ 2,282,939.43	\$ 4,701,058.11	\$ 10,203,337.21	\$ 183,041.65	\$ 975,291.96	\$ 918,439.01	\$ 620,519.66	\$ 6,008,602.96	\$ 170,118.57	
Total	\$ 35,312,144.94	\$ 15,572,192.48	\$ 763,006,115.24	\$ 181,946,826.84	\$ 375,359,230.80	\$ 812,985,784.23	\$ 14,376,137.10	\$ 78,248,629.79	\$ 73,800,902.97	\$ 49,915,792.83	\$ 480,109,653.08	\$ 13,361,155.19	
						</							

Scoring

Total Scoring Cost												
Government Direct Loan Principle	\$ -		https://core.ac.uk/download/pdf/36703392.pdf									
Total Scoring	\$0		7% - Highest according to literature									
Interest Subsidy	0%											
Default Subsidy	0%		5% - If using rate for AF occupancy (95%)									
Total Subsidy	0%											
IRR: Government	0%											
- Range is from 0-7% for AF Projects and to be as conservative as possible, go with 0%												

Project Management

For the Privatization alternative, Project Management Costs included a one time transition fee of \$65,000 per installation, annual Title II fees of \$300,000 per installation during the IDP, annual portfolio management fees of \$200,000 per installation during the IDP and annual portfolio management fees of \$175,000 per installation for every year following the conclusion of the IDP.

Manpower Status Quo

Discounted Manpower (Status Quo)													
Year	Altus	Columbus	Pt Sam	Goodfellow	Keesler	Lackland	Laughlin	Luke	Maxwell	Randolph	Sheppard	Vance	
1	\$ 356,014.92	\$ 253,661.98	\$ 2,188,892.81	\$ 725,671.19	\$ 1,219,629.20	\$ 2,442,798.51	\$ 284,978.28	\$ 456,073.86	\$ 394,950.56	\$ 364,534.77	\$ 1,541,701.74	\$ 254,157.40	
2	\$ 349,407.15	\$ 248,953.92	\$ 2,148,266.11	\$ 712,202.45	\$ 1,196,992.41	\$ 2,397,493.23	\$ 279,688.97	\$ 447,608.96	\$ 387,620.13	\$ 357,768.86	\$ 1,513,087.16	\$ 249,440.14	
3	\$ 343,431.78	\$ 244,696.45	\$ 2,111,527.65	\$ 700,022.76	\$ 1,176,522.11	\$ 2,356,493.20	\$ 274,905.88	\$ 439,954.19	\$ 380,991.26	\$ 351,650.50	\$ 1,487,211.17	\$ 245,174.35	
4	\$ 338,467.78	\$ 241,159.58	\$ 2,081,007.40	\$ 689,904.55	\$ 1,159,516.53	\$ 2,322,398.69	\$ 270,932.36	\$ 433,595.05	\$ 375,484.37	\$ 346,567.70	\$ 1,465,714.86	\$ 241,630.58	
5	\$ 333,575.53	\$ 237,673.83	\$ 2,050,928.30	\$ 679,932.60	\$ 1,142,756.76	\$ 2,288,830.49	\$ 267,016.28	\$ 427,327.82	\$ 370,057.08	\$ 341,558.38	\$ 1,444,529.27	\$ 238,138.02	
6	\$ 328,753.99	\$ 234,238.47	\$ 2,021,283.96	\$ 670,104.78	\$ 1,126,239.23	\$ 2,255,747.49	\$ 263,156.80	\$ 421,151.18	\$ 364,708.24	\$ 336,621.46	\$ 1,423,649.89	\$ 234,695.95	
7	\$ 324,002.15	\$ 230,852.76	\$ 1,992,068.11	\$ 660,419.01	\$ 1,109,960.45	\$ 2,223,142.68	\$ 259,353.10	\$ 415,063.81	\$ 359,436.71	\$ 331,755.89	\$ 1,403,072.30	\$ 231,303.63	
8	\$ 319,318.99	\$ 227,515.99	\$ 1,963,274.55	\$ 650,873.25	\$ 1,093,916.96	\$ 2,191,009.14	\$ 255,604.38	\$ 409,064.44	\$ 354,241.37	\$ 326,960.66	\$ 1,382,792.14	\$ 227,960.19	
9	\$ 314,703.52	\$ 224,227.45	\$ 1,934,897.17	\$ 641,465.46	\$ 1,078,105.37	\$ 2,159,340.06	\$ 251,909.85	\$ 403,151.78	\$ 349,121.13	\$ 322,234.74	\$ 1,362,805.12	\$ 224,665.38	
10	\$ 310,154.76	\$ 220,986.44	\$ 1,906,929.96	\$ 632,193.65	\$ 1,062,522.32	\$ 2,128,128.73	\$ 248,268.72	\$ 397,324.58	\$ 344,074.89	\$ 317,577.12	\$ 1,343,106.99	\$ 221,418.04	
11	\$ 305,671.75	\$ 217,792.28	\$ 1,879,366.99	\$ 623,055.85	\$ 1,047,164.51	\$ 2,097,368.53	\$ 244,680.22	\$ 391,581.61	\$ 339,101.60	\$ 312,986.83	\$ 1,323,693.58	\$ 218,217.64	
12	\$ 301,253.54	\$ 214,644.29	\$ 1,852,202.42	\$ 614,050.14	\$ 1,032,028.68	\$ 2,067,052.94	\$ 241,143.58	\$ 385,921.64	\$ 334,200.19	\$ 308,462.88	\$ 1,304,560.77	\$ 215,063.50	
13	\$ 296,899.19	\$ 211,541.80	\$ 1,825,430.49	\$ 605,174.59	\$ 1,017,111.63	\$ 2,037,175.54	\$ 237,658.07	\$ 380,343.49	\$ 329,369.62	\$ 304,004.33	\$ 1,285,704.51	\$ 211,954.95	
14	\$ 292,607.77	\$ 208,484.15	\$ 1,799,045.52	\$ 596,427.33	\$ 1,002,410.19	\$ 2,007,729.99	\$ 234,222.93	\$ 374,845.97	\$ 324,608.88	\$ 299,610.22	\$ 1,267,120.80	\$ 208,891.33	
15	\$ 288,378.39	\$ 205,470.70	\$ 1,773,041.93	\$ 587,806.51	\$ 987,921.25	\$ 1,978,710.05	\$ 230,837.45	\$ 369,427.90	\$ 319,916.95	\$ 295,279.62	\$ 1,248,805.70	\$ 205,871.99	
16	\$ 284,210.14	\$ 202,500.80	\$ 1,747,414.19	\$ 579,310.29	\$ 973,641.73	\$ 1,950,109.56	\$ 227,500.90	\$ 364,088.15	\$ 315,292.83	\$ 291,011.62	\$ 1,230,755.33	\$ 202,896.30	
17	\$ 280,102.13	\$ 199,573.83	\$ 1,722,156.88	\$ 570,936.88	\$ 959,568.61	\$ 1,921,922.47	\$ 224,212.58	\$ 358,825.58	\$ 310,735.56	\$ 286,805.30	\$ 1,212,965.86	\$ 199,963.61	
18	\$ 276,053.51	\$ 196,689.17	\$ 1,697,264.64	\$ 562,684.50	\$ 945,698.90	\$ 1,894,142.80	\$ 220,971.79	\$ 353,639.08	\$ 306,244.15	\$ 282,659.79	\$ 1,195,433.53	\$ 197,073.32	
19	\$ 272,063.40	\$ 193,846.21	\$ 1,672,732.20	\$ 554,551.40	\$ 932,029.67	\$ 1,866,764.66	\$ 217,777.84	\$ 348,527.54	\$ 301,817.67	\$ 278,574.19	\$ 1,178,154.60	\$ 194,224.80	
20	\$ 268,130.97	\$ 191,044.33	\$ 1,648,554.35	\$ 546,535.85	\$ 918,588.01	\$ 1,839,782.84	\$ 214,630.05	\$ 343,489.89	\$ 297,455.16	\$ 274,547.65	\$ 1,161,125.43	\$ 191,417.45	
21	\$ 264,253.37	\$ 188,282.96	\$ 1,624,725.97	\$ 538,636.16	\$ 905,281.08	\$ 1,813,189.83	\$ 211,527.77	\$ 338,525.05	\$ 293,155.71	\$ 270,579.31	\$ 1,144,342.40	\$ 188,650.68	
22	\$ 260,435.80	\$ 185,561.50	\$ 1,601,242.01	\$ 530,850.66	\$ 892,196.05	\$ 1,786,981.80	\$ 208,470.32	\$ 333,631.97	\$ 288,918.41	\$ 266,668.33	\$ 1,127,801.95	\$ 185,923.91	
23	\$ 256,671.43	\$ 182,879.37	\$ 1,578,097.49	\$ 523,177.69	\$ 879,300.15	\$ 1,761,152.57	\$ 205,457.07	\$ 328,809.62	\$ 284,742.35	\$ 262,813.88	\$ 1,111,500.58	\$ 183,236.54	
24	\$ 252,961.48	\$ 180,236.01	\$ 1,555,287.50	\$ 515,615.62	\$ 866,590.66	\$ 1,735,696.68	\$ 202,487.37	\$ 324,056.97	\$ 280,626.66	\$ 259,015.14	\$ 1,095,434.84	\$ 180,588.02	
25	\$ 249,305.14	\$ 177,630.86	\$ 1,532,807.21	\$ 508,162.86	\$ 854,064.86	\$ 1,710,608.74	\$ 199,560.60	\$ 319,373.02	\$ 276,570.45	\$ 255,271.30	\$ 1,079,601.30	\$ 177,977.78	
26	\$ 245,701.66	\$ 175,063.37	\$ 1,510,651.85	\$ 500,817.82	\$ 841,720.12	\$ 1,685,883.42	\$ 196,676.13	\$ 314,756.77	\$ 272,572.87	\$ 251,581.59	\$ 1,063,996.63	\$ 175,405.27	
27	\$ 242,150.26	\$ 172,532.98	\$ 1,488,816.72	\$ 493,578.94	\$ 829,553.81	\$ 1,661,515.48	\$ 193,833.35	\$ 310,207.24	\$ 268,633.07	\$ 247,945.20	\$ 1,048,617.51	\$ 172,869.95	
28	\$ 238,650.20	\$ 170,039.17	\$ 1,467,297.21	\$ 486,444.70	\$ 817,563.35	\$ 1,637,499.76	\$ 191,031.66	\$ 305,723.47	\$ 264,750.22	\$ 244,361.37	\$ 1,033,460.68	\$ 170,371.27	
29	\$ 235,200.72	\$ 167,581.41	\$ 1,446,088.74	\$ 479,413.58	\$ 805,746.96	\$ 1,613,831.16	\$ 188,270.47	\$ 301,304.51	\$ 260,923.49	\$ 240,829.35	\$ 1,018,322.93	\$ 167,908.70	
30	\$ 231,801.11	\$ 165,159.17	\$ 1,425,186.82	\$ 472,484.08	\$ 794,099.62	\$ 1,590,504.66	\$ 185,549.19	\$ 296,949.42	\$ 257,152.08	\$ 237,348.37	\$ 1,003,801.09	\$ 165,481.43	
31	\$ 228,450.63	\$ 162,771.94	\$ 1,404,587.02	\$ 465,654.75	\$ 782,621.85	\$ 1,567,515.35	\$ 182,867.24	\$ 292,657.29	\$ 253,435.18	\$ 233,917.72	\$ 989,292.05	\$ 163,089.84	
32	\$ 225,148.58	\$ 160,419.22	\$ 1,384,284.97	\$ 458,924.13	\$ 771,309.75	\$ 1,544,858.32	\$ 180,224.06	\$ 288,427.19	\$ 249,772.00	\$ 230,536.64	\$ 974,992.71	\$ 160,732.52	
33	\$ 221,894.26	\$ 158,100.50	\$ 1,364,276.37	\$ 452,290.79	\$ 760,161.16	\$ 1,522,528.77	\$ 177,619.08	\$ 284,258.23	\$ 246,161.77	\$ 227,204.44	\$ 960,900.07	\$ 158,409.28	
34	\$ 218,686.97	\$ 155,815.30	\$ 1,344,556.97	\$ 445,753.33	\$ 749,173.71	\$ 1,500,521.98	\$ 175,051.76	\$ 280,149.53	\$ 242,603.72	\$ 223,920.41	\$ 947,011.11	\$ 156,119.62	
35	\$ 215,526.05	\$ 153,563.13	\$ 1,325,122.60	\$ 439,310.36	\$ 738,345.07	\$ 1,478,833.28	\$ 172,521.54	\$ 276,100.22	\$ 239,097.10	\$ 220,683.84	\$ 933,322.91	\$ 153,863.05	
36	\$ 212,410.81	\$ 151,343.51	\$ 1,305,969.14	\$ 432,960.52	\$ 727,672.96	\$ 1,457,458.06	\$ 170,027.89	\$ 272,109.44	\$ 235,641.16	\$ 217,494.05	\$ 919,832.57	\$ 151,639.09	
37	\$ 209,340.60	\$ 149,155.98	\$ 1,287,092.52	\$ 426,702.47	\$ 717,155.09	\$ 1,436,391.81	\$ 167,570.29	\$ 268,176.34	\$ 232,235.18	\$ 214,350.37	\$ 906,537.21	\$ 149,447.63	
38	\$ 206,314.77	\$ 147,000.06	\$ 1,268,488.75	\$ 420,534.86	\$ 706,789.26	\$ 1,415,630.05	\$ 165,148.21	\$ 264,300.09	\$ 228,878.43	\$ 211,252.12	\$ 893,434.02	\$ 147,287.16	
39	\$ 203,332.68	\$ 144,875.30	\$ 1,250,153.88	\$ 414,456.41	\$ 696,573.25	\$ 1,395,168.38	\$ 162,761.14	\$ 260,479.87	\$ 225,570.19	\$ 208,198.66	\$ 880,520.23	\$ 145,158.25	
40	\$ 200,393.69	\$ 142,781.26	\$ 1,232,084.02	\$ 408,465.81	\$ 686,504.91	\$ 1,375,002.47	\$ 160,408.58	\$ 256,714.86	\$ 222,309.78	\$ 205,189.34	\$ 867,793.10	\$ 143,060.12	
41	\$ 197,497.17	\$ 140,717.49	\$ 1,214,275.35	\$ 402,561.80	\$ 676,582.09	\$ 1,355,128.04	\$ 158,090.02	\$ 253,004.28	\$ 219,096.49	\$ 202,223.51	\$ 855,249.93	\$ 140,992.32	
42	\$ 194,642.53	\$ 138,683.54	\$ 1,196,724.08	\$ 396,743.13	\$ 666,802.70	\$ 1,335,540.87	\$ 155,804.97	\$ 249,347.33	\$ 215,929.65	\$ 199,300.55	\$ 842,888.05	\$ 138,954.40	
43	\$ 191,829.14	\$ 136,678.99	\$ 1,179,426.51	\$ 391,008.56	\$ 657,164.67	\$ 1,316,236.82	\$ 153,552.94	\$ 245,743.24	\$ 212,808.58	\$ 196,419.84	\$ 830,704.86	\$ 136,945.94	
44	\$ 189,056.43	\$ 134,703.92	\$ 1,162,378.95	\$ 385,356.88	\$ 647,665.94	\$ 1,297,211.80	\$ 151,333.47	\$ 242,191.24	\$ 209,732.62	\$ 193,580.76	\$ 818,697.76	\$ 134,966.50	
45	\$ 186,323.78	\$ 132,756.40	\$ 1,145,577.80	\$ 379,786.90	\$ 638,304.51	\$ 1,278,461.76	\$ 149,146.08	\$ 238,690.58	\$ 206,701.12	\$ 190,782.73	\$ 806,864.22	\$ 133,015.68	
46	\$ 183,630.64	\$ 130,837.53	\$ 1,129,019.50	\$ 374,297.41	\$ 629,078.38	\$ 1,259,982.74	\$ 146,990.31	\$ 235,240.52	\$ 203,713.44	\$ 188,025.13	\$ 795,201.72	\$ 131,093.06	
47	\$ 180,976.42	\$ 128,946.39	\$ 1,112,700.53	\$ 368,887.28	\$ 619,985.62	\$ 1,241,770.81	\$ 144,865.70	\$ 231,840.33	\$ 200,768.94	\$ 185,307.40	\$ 783,707.79	\$ 129,198.23	
48	\$ 178,360.57	\$ 127,082.58	\$ 1,096,617.44	\$ 363,555.34	\$ 611,024.28	\$ 1,223,822.13	\$ 142,771.79	\$ 228,489.28	\$ 197,867.01	\$ 182,628.95	\$ 772,379.99	\$ 127,330.78	
49	\$ 175,782.53	\$ 125,245.72	\$ 1,080,766.81	\$ 358,300.48	\$ 602,192.47	\$ 1,206,132.87	\$ 140,708.15	\$ 225,186.68	\$ 195,007.02	\$ 179,989.21	\$ 761,215.93	\$ 125,490.33	
50	\$ 173,241.75	\$ 123,435.40	\$ 1,065,145.29	\$ 353,121.56	\$ 593,488.32	\$ 1,188,699.30	\$ 138,674.34	\$ 221,931.80	\$ 192,188.37	\$ 177,387.62	\$ 750,213.23	\$ 123,676.48	
Total	\$ 12,653,174.53	\$ 9,015,434.88	\$ 77,795,735.60	\$ 25,791,177.92	\$ 43,347,006.67	\$ 86,819,832.74	\$ 10,128,451.54	\$ 16,209,382.92	\$ 14,036,991.39	\$ 12,955,979.64	\$ 54,793,830.13	\$ 9,033,042.54	

Manpower Privatization

Discounted Manpower (Privatization)												
Year	Altus	Columbus	Ft Sam	Goodfellow	Keesler	Lackland	Laughlin	Luke	Maxwell	Randolph	Sheppard	Vance
1	\$ 208,527.53	\$ 183,594.89	\$ 194,927.91	\$ 203,994.33	\$ 199,461.12	\$ 194,927.91	\$ 206,260.93	\$ 219,860.55	\$ 190,394.70	\$ 194,927.91	\$ 208,527.53	\$ 208,527.53
2	\$ 204,657.18	\$ 180,187.30	\$ 191,309.97	\$ 200,208.11	\$ 195,759.04	\$ 191,309.97	\$ 202,432.65	\$ 215,779.85	\$ 186,860.90	\$ 191,309.97	\$ 204,657.18	\$ 204,657.18
3	\$ 201,157.25	\$ 177,105.84	\$ 188,038.30	\$ 196,784.26	\$ 192,411.28	\$ 188,038.30	\$ 198,970.75	\$ 212,089.71	\$ 183,665.31	\$ 188,038.30	\$ 201,157.25	\$ 201,157.25
4	\$ 198,249.70	\$ 174,545.93	\$ 185,320.37	\$ 193,939.92	\$ 189,630.15	\$ 185,320.37	\$ 196,094.81	\$ 209,024.14	\$ 181,010.59	\$ 185,320.37	\$ 198,249.70	\$ 198,249.70
5	\$ 195,384.18	\$ 172,023.02	\$ 182,641.73	\$ 191,136.69	\$ 186,889.21	\$ 182,641.73	\$ 193,260.43	\$ 206,002.88	\$ 178,394.25	\$ 182,641.73	\$ 195,384.18	\$ 195,384.18
6	\$ 192,560.07	\$ 169,536.59	\$ 180,001.81	\$ 188,373.98	\$ 184,187.90	\$ 180,001.81	\$ 190,467.03	\$ 203,025.29	\$ 175,815.72	\$ 180,001.81	\$ 192,560.07	\$ 192,560.07
7	\$ 189,776.79	\$ 167,086.09	\$ 177,400.04	\$ 185,651.21	\$ 181,525.62	\$ 177,400.04	\$ 187,714.00	\$ 200,090.74	\$ 173,274.46	\$ 177,400.04	\$ 189,776.79	\$ 189,776.79
8	\$ 187,033.73	\$ 164,671.01	\$ 174,835.88	\$ 182,967.78	\$ 178,901.83	\$ 174,835.88	\$ 185,000.76	\$ 197,198.61	\$ 170,769.93	\$ 174,835.88	\$ 187,033.73	\$ 187,033.73
9	\$ 184,330.33	\$ 162,290.83	\$ 172,308.79	\$ 180,323.15	\$ 176,315.97	\$ 172,308.79	\$ 182,326.74	\$ 194,348.28	\$ 168,301.60	\$ 172,308.79	\$ 184,330.33	\$ 184,330.33
10	\$ 181,666.00	\$ 159,945.06	\$ 169,818.22	\$ 177,716.74	\$ 173,767.48	\$ 169,818.22	\$ 179,691.37	\$ 191,539.15	\$ 165,868.96	\$ 169,818.22	\$ 181,666.00	\$ 181,666.00
11	\$ 179,040.18	\$ 157,633.20	\$ 167,363.65	\$ 175,148.00	\$ 171,255.82	\$ 167,363.65	\$ 177,094.09	\$ 188,770.62	\$ 163,471.47	\$ 167,363.65	\$ 179,040.18	\$ 179,040.18
12	\$ 176,452.31	\$ 155,354.75	\$ 164,944.55	\$ 172,616.39	\$ 168,780.47	\$ 164,944.55	\$ 174,534.35	\$ 186,042.11	\$ 161,108.63	\$ 164,944.55	\$ 176,452.31	\$ 176,452.31
13	\$ 173,901.85	\$ 153,109.24	\$ 162,560.43	\$ 170,121.38	\$ 166,340.90	\$ 162,560.43	\$ 172,011.62	\$ 183,353.04	\$ 158,779.95	\$ 162,560.43	\$ 173,901.85	\$ 173,901.85
14	\$ 171,388.26	\$ 150,896.18	\$ 160,210.76	\$ 167,662.43	\$ 163,936.59	\$ 160,210.76	\$ 169,525.34	\$ 180,702.84	\$ 156,484.93	\$ 160,210.76	\$ 171,388.26	\$ 171,388.26
15	\$ 168,910.99	\$ 148,715.11	\$ 157,895.06	\$ 165,239.01	\$ 161,567.04	\$ 157,895.06	\$ 167,075.00	\$ 178,090.94	\$ 154,223.08	\$ 157,895.06	\$ 168,910.99	\$ 168,910.99
16	\$ 166,469.54	\$ 146,565.57	\$ 155,612.83	\$ 162,850.63	\$ 159,231.73	\$ 155,612.83	\$ 164,660.08	\$ 175,516.79	\$ 151,993.92	\$ 155,612.83	\$ 166,469.54	\$ 166,469.54
17	\$ 164,063.37	\$ 144,447.10	\$ 153,363.58	\$ 160,496.77	\$ 156,930.18	\$ 153,363.58	\$ 162,280.07	\$ 172,979.85	\$ 149,796.99	\$ 153,363.58	\$ 164,063.37	\$ 164,063.37
18	\$ 161,691.98	\$ 142,359.24	\$ 151,146.85	\$ 158,176.93	\$ 154,661.89	\$ 151,146.85	\$ 159,934.46	\$ 170,479.59	\$ 147,631.81	\$ 151,146.85	\$ 161,691.98	\$ 161,691.98
19	\$ 159,354.86	\$ 140,301.57	\$ 148,962.16	\$ 155,890.63	\$ 152,426.39	\$ 148,962.16	\$ 157,622.75	\$ 168,015.46	\$ 145,497.92	\$ 148,962.16	\$ 159,354.86	\$ 159,354.86
20	\$ 157,051.53	\$ 138,273.63	\$ 146,809.04	\$ 153,637.37	\$ 150,223.21	\$ 146,809.04	\$ 155,344.45	\$ 165,586.94	\$ 143,394.88	\$ 146,809.04	\$ 157,051.53	\$ 157,051.53
21	\$ 154,781.49	\$ 136,275.01	\$ 144,687.05	\$ 151,416.68	\$ 148,051.86	\$ 144,687.05	\$ 153,099.09	\$ 163,193.53	\$ 141,322.23	\$ 144,687.05	\$ 154,781.49	\$ 154,781.49
22	\$ 152,544.27	\$ 134,305.28	\$ 142,595.73	\$ 149,228.09	\$ 145,911.91	\$ 142,595.73	\$ 150,886.18	\$ 160,834.71	\$ 139,279.55	\$ 142,595.73	\$ 152,544.27	\$ 152,544.27
23	\$ 150,339.37	\$ 132,364.01	\$ 140,534.63	\$ 147,071.13	\$ 143,802.88	\$ 140,534.63	\$ 148,705.25	\$ 158,509.99	\$ 137,266.38	\$ 140,534.63	\$ 150,339.37	\$ 150,339.37
24	\$ 148,166.35	\$ 130,450.81	\$ 138,503.33	\$ 144,945.35	\$ 141,724.34	\$ 138,503.33	\$ 146,555.85	\$ 156,218.87	\$ 135,282.32	\$ 138,503.33	\$ 148,166.35	\$ 148,166.35
25	\$ 146,024.74	\$ 128,565.26	\$ 136,501.39	\$ 142,850.29	\$ 139,675.84	\$ 136,501.39	\$ 144,437.52	\$ 153,960.87	\$ 133,326.94	\$ 136,501.39	\$ 146,024.74	\$ 146,024.74
26	\$ 143,914.08	\$ 126,706.96	\$ 134,528.38	\$ 140,785.52	\$ 137,656.95	\$ 134,528.38	\$ 142,349.80	\$ 151,735.50	\$ 131,399.82	\$ 134,528.38	\$ 143,914.08	\$ 143,914.08
27	\$ 141,833.93	\$ 124,875.53	\$ 132,583.89	\$ 138,750.59	\$ 135,667.24	\$ 132,583.89	\$ 140,292.26	\$ 149,542.30	\$ 129,500.55	\$ 132,583.89	\$ 141,833.93	\$ 141,833.93
28	\$ 139,783.85	\$ 123,070.56	\$ 130,667.51	\$ 136,745.07	\$ 133,706.29	\$ 130,667.51	\$ 138,264.46	\$ 147,380.80	\$ 127,628.73	\$ 130,667.51	\$ 139,783.85	\$ 139,783.85
29	\$ 137,763.40	\$ 121,291.69	\$ 128,778.83	\$ 134,768.54	\$ 131,773.69	\$ 128,778.83	\$ 136,265.97	\$ 145,250.54	\$ 125,783.97	\$ 128,778.83	\$ 137,763.40	\$ 137,763.40
30	\$ 135,772.15	\$ 119,538.53	\$ 126,917.45	\$ 132,820.59	\$ 129,869.02	\$ 126,917.45	\$ 134,296.37	\$ 143,151.08	\$ 123,965.88	\$ 126,917.45	\$ 135,772.15	\$ 135,772.15
31	\$ 133,809.69	\$ 117,810.70	\$ 125,082.97	\$ 130,900.78	\$ 127,991.88	\$ 125,082.97	\$ 132,355.24	\$ 141,081.95	\$ 122,174.06	\$ 125,082.97	\$ 133,809.69	\$ 133,809.69
32	\$ 131,875.59	\$ 116,107.86	\$ 123,275.01	\$ 129,008.73	\$ 126,141.87	\$ 123,275.01	\$ 130,442.16	\$ 139,042.74	\$ 120,408.15	\$ 123,275.01	\$ 131,875.59	\$ 131,875.59
33	\$ 129,969.45	\$ 114,429.62	\$ 121,493.18	\$ 127,144.02	\$ 124,318.60	\$ 121,493.18	\$ 128,556.73	\$ 137,033.00	\$ 118,667.75	\$ 121,493.18	\$ 129,969.45	\$ 129,969.45
34	\$ 128,090.85	\$ 112,775.64	\$ 119,737.10	\$ 125,306.27	\$ 122,521.69	\$ 119,737.10	\$ 126,698.56	\$ 135,052.31	\$ 116,952.52	\$ 119,737.10	\$ 128,090.85	\$ 128,090.85
35	\$ 126,239.41	\$ 111,145.57	\$ 118,006.41	\$ 123,495.08	\$ 120,750.74	\$ 118,006.41	\$ 124,867.25	\$ 133,100.25	\$ 115,262.07	\$ 118,006.41	\$ 126,239.41	\$ 126,239.41
36	\$ 124,414.74	\$ 109,539.06	\$ 116,300.73	\$ 121,710.07	\$ 119,005.40	\$ 116,300.73	\$ 123,062.40	\$ 131,176.41	\$ 113,596.06	\$ 116,300.73	\$ 124,414.74	\$ 124,414.74
37	\$ 122,616.43	\$ 107,955.77	\$ 114,619.71	\$ 119,950.86	\$ 117,285.28	\$ 114,619.71	\$ 121,283.65	\$ 129,280.37	\$ 111,954.13	\$ 114,619.71	\$ 122,616.43	\$ 122,616.43
38	\$ 120,844.12	\$ 106,395.37	\$ 112,962.98	\$ 118,217.08	\$ 115,590.03	\$ 112,962.98	\$ 119,530.60	\$ 127,411.74	\$ 110,335.94	\$ 112,962.98	\$ 120,844.12	\$ 120,844.12
39	\$ 119,097.43	\$ 104,857.52	\$ 111,330.20	\$ 116,508.35	\$ 113,919.28	\$ 111,330.20	\$ 117,802.89	\$ 125,570.11	\$ 108,741.13	\$ 111,330.20	\$ 119,097.43	\$ 119,097.43
40	\$ 117,375.98	\$ 103,341.90	\$ 109,721.03	\$ 114,824.33	\$ 112,272.68	\$ 109,721.03	\$ 116,100.16	\$ 123,755.11	\$ 107,169.37	\$ 109,721.03	\$ 117,375.98	\$ 117,375.98
41	\$ 115,679.42	\$ 101,848.18	\$ 108,135.11	\$ 113,164.65	\$ 110,649.88	\$ 108,135.11	\$ 114,422.03	\$ 121,966.34	\$ 105,620.34	\$ 108,135.11	\$ 115,679.42	\$ 115,679.42
42	\$ 114,007.37	\$ 100,376.06	\$ 106,572.11	\$ 111,528.95	\$ 109,050.53	\$ 106,572.11	\$ 112,768.16	\$ 120,203.43	\$ 104,093.69	\$ 106,572.11	\$ 114,007.37	\$ 114,007.37
43	\$ 112,359.50	\$ 98,925.21	\$ 105,031.71	\$ 109,916.90	\$ 107,474.30	\$ 105,031.71	\$ 111,138.20	\$ 118,465.99	\$ 102,589.11	\$ 105,031.71	\$ 112,359.50	\$ 112,359.50
44	\$ 110,735.44	\$ 97,495.34	\$ 103,513.57	\$ 108,328.15	\$ 105,920.86	\$ 103,513.57	\$ 109,531.80	\$ 116,753.67	\$ 101,106.27	\$ 103,513.57	\$ 110,735.44	\$ 110,735.44
45	\$ 109,134.86	\$ 96,086.13	\$ 102,017.37	\$ 106,762.36	\$ 104,389.87	\$ 102,017.37	\$ 107,948.61	\$ 115,066.10	\$ 99,644.87	\$ 102,017.37	\$ 109,134.86	\$ 109,134.86
46	\$ 107,557.41	\$ 94,697.29	\$ 100,542.80	\$ 105,219.21	\$ 102,881.00	\$ 100,542.80	\$ 106,388.31	\$ 113,402.93	\$ 98,204.60	\$ 100,542.80	\$ 107,557.41	\$ 107,557.41
47	\$ 106,002.77	\$ 93,328.52	\$ 99,089.54	\$ 103,698.36	\$ 101,393.95	\$ 99,089.54	\$ 104,850.56	\$ 111,763.79	\$ 96,785.14	\$ 99,089.54	\$ 106,002.77	\$ 106,002.77
48	\$ 104,470.59	\$ 91,979.54	\$ 97,657.29	\$ 102,199.49	\$ 99,928.39	\$ 97,657.29	\$ 103,335.04	\$ 110,148.34	\$ 95,386.19	\$ 97,657.29	\$ 104,470.59	\$ 104,470.59
49	\$ 102,960.56	\$ 90,650.06	\$ 96,245.74	\$ 100,722.29	\$ 98,484.02	\$ 96,245.74	\$ 101,841.43	\$ 108,556.25	\$ 94,007.47	\$ 96,245.74	\$ 102,960.56	\$ 102,960.56
50	\$ 101,472.36	\$ 89,339.80	\$ 94,854.60	\$ 99,266.44	\$ 97,060.52	\$ 94,854.60	\$ 100,369.40	\$ 106,987.16	\$ 92,648.68	\$ 94,854.60	\$ 101,472.36	\$ 101,472.36
Total	\$ 7,411,305.26	\$ 6,525,170.93	\$ 6,927,959.26	\$ 7,250,189.93	\$ 7,089,074.59	\$ 6,927,959.26	\$ 7,330,747.59	\$ 7,814,093.59	\$ 6,766,843.93	\$ 6,927,959.26	\$ 7,411,305.26	\$ 7,411,305.26
		AETC NPV =	\$ 85,793,914.12									

Manpower Identical FSRM

Discounted Manpower (FSRM)													
Year	Altus	Columbus	Pt Sam	Goodfellow	Keesler	Lackland	Laughlin	Luke	Maxwell	Randolph	Sheppard	Vance	
1	\$ 356,014.92	\$ 253,661.98	\$ 2,188,892.81	\$ 725,671.19	\$ 1,219,629.20	\$ 2,442,798.51	\$ 284,978.28	\$ 456,073.86	\$ 394,950.56	\$ 364,534.77	\$ 1,541,701.74	\$ 254,157.40	
2	\$ 349,407.15	\$ 248,953.92	\$ 2,148,266.11	\$ 712,202.45	\$ 1,196,992.41	\$ 2,397,459.23	\$ 279,688.97	\$ 447,608.96	\$ 387,620.13	\$ 357,768.86	\$ 1,513,087.16	\$ 249,440.14	
3	\$ 343,431.78	\$ 244,696.45	\$ 2,111,527.65	\$ 700,022.76	\$ 1,176,522.11	\$ 2,356,459.20	\$ 274,905.88	\$ 439,954.19	\$ 380,991.26	\$ 351,650.50	\$ 1,487,211.17	\$ 245,174.35	
4	\$ 338,467.78	\$ 241,159.58	\$ 2,081,007.40	\$ 689,904.55	\$ 1,159,516.53	\$ 2,322,398.69	\$ 270,932.36	\$ 433,595.05	\$ 375,484.37	\$ 346,567.70	\$ 1,465,714.86	\$ 241,630.58	
5	\$ 333,575.53	\$ 237,673.83	\$ 2,050,928.30	\$ 679,932.60	\$ 1,142,756.76	\$ 2,288,830.49	\$ 267,016.28	\$ 427,327.82	\$ 370,057.08	\$ 341,558.38	\$ 1,444,529.27	\$ 238,138.02	
6	\$ 328,753.99	\$ 234,238.47	\$ 2,021,283.96	\$ 670,104.78	\$ 1,126,239.23	\$ 2,255,747.49	\$ 263,156.80	\$ 421,151.18	\$ 364,708.24	\$ 336,621.46	\$ 1,423,649.89	\$ 234,695.95	
7	\$ 324,002.15	\$ 230,852.76	\$ 1,992,068.11	\$ 660,419.01	\$ 1,109,960.45	\$ 2,223,142.68	\$ 259,353.10	\$ 415,063.81	\$ 359,436.71	\$ 331,755.89	\$ 1,403,072.30	\$ 231,303.63	
8	\$ 319,318.99	\$ 227,515.99	\$ 1,963,274.55	\$ 650,873.25	\$ 1,093,916.96	\$ 2,191,009.14	\$ 255,604.38	\$ 409,064.44	\$ 354,241.37	\$ 326,960.66	\$ 1,382,792.14	\$ 227,960.34	
9	\$ 314,703.52	\$ 224,227.45	\$ 1,934,897.17	\$ 641,465.46	\$ 1,078,105.37	\$ 2,159,340.06	\$ 251,909.85	\$ 403,151.78	\$ 349,121.13	\$ 322,234.74	\$ 1,362,805.12	\$ 224,665.38	
10	\$ 310,154.76	\$ 220,986.44	\$ 1,906,929.96	\$ 632,193.65	\$ 1,062,522.32	\$ 2,128,128.73	\$ 248,268.72	\$ 397,324.58	\$ 344,074.89	\$ 317,577.12	\$ 1,343,106.99	\$ 221,418.04	
11	\$ 305,671.75	\$ 217,792.28	\$ 1,879,366.99	\$ 623,055.85	\$ 1,047,164.51	\$ 2,097,368.53	\$ 244,680.22	\$ 391,581.61	\$ 339,101.60	\$ 312,986.83	\$ 1,323,693.58	\$ 218,217.64	
12	\$ 301,253.54	\$ 214,644.29	\$ 1,852,202.42	\$ 614,050.14	\$ 1,032,028.68	\$ 2,067,052.94	\$ 241,143.58	\$ 385,921.64	\$ 334,200.19	\$ 308,462.88	\$ 1,304,560.77	\$ 215,063.50	
13	\$ 296,899.19	\$ 211,541.80	\$ 1,825,430.49	\$ 605,174.59	\$ 1,017,111.63	\$ 2,037,175.54	\$ 237,658.07	\$ 380,343.49	\$ 329,369.62	\$ 304,004.33	\$ 1,285,704.51	\$ 211,954.95	
14	\$ 292,607.77	\$ 208,484.15	\$ 1,799,045.52	\$ 596,427.33	\$ 1,002,410.19	\$ 2,007,729.99	\$ 234,222.93	\$ 374,845.97	\$ 324,608.88	\$ 299,610.22	\$ 1,267,120.80	\$ 208,891.33	
15	\$ 288,378.39	\$ 205,470.70	\$ 1,773,041.93	\$ 587,806.51	\$ 987,921.25	\$ 1,978,710.05	\$ 230,837.45	\$ 369,427.90	\$ 319,916.95	\$ 295,279.62	\$ 1,248,805.70	\$ 205,871.99	
16	\$ 284,210.14	\$ 202,500.80	\$ 1,747,414.19	\$ 579,310.29	\$ 973,641.73	\$ 1,950,109.56	\$ 227,500.90	\$ 364,088.15	\$ 315,292.83	\$ 291,011.62	\$ 1,230,755.33	\$ 202,896.30	
17	\$ 280,102.13	\$ 199,573.83	\$ 1,722,156.88	\$ 570,936.88	\$ 959,568.61	\$ 1,921,922.47	\$ 224,212.58	\$ 358,825.58	\$ 310,735.56	\$ 286,805.30	\$ 1,212,965.86	\$ 199,963.61	
18	\$ 276,053.51	\$ 196,689.17	\$ 1,697,264.64	\$ 562,684.50	\$ 945,698.90	\$ 1,894,142.80	\$ 220,971.79	\$ 353,639.08	\$ 306,244.15	\$ 282,659.79	\$ 1,195,433.53	\$ 197,073.32	
19	\$ 272,063.40	\$ 193,846.21	\$ 1,672,732.20	\$ 554,551.40	\$ 932,029.67	\$ 1,866,764.66	\$ 217,777.84	\$ 348,527.54	\$ 301,817.67	\$ 278,574.19	\$ 1,178,154.60	\$ 194,224.80	
20	\$ 268,130.97	\$ 191,044.33	\$ 1,648,735.25	\$ 546,535.85	\$ 918,558.01	\$ 1,839,782.24	\$ 214,630.05	\$ 343,489.89	\$ 297,455.16	\$ 274,547.65	\$ 1,161,125.43	\$ 191,417.45	
21	\$ 264,255.37	\$ 188,282.96	\$ 1,624,754.97	\$ 538,636.16	\$ 905,281.08	\$ 1,813,189.83	\$ 211,527.77	\$ 338,525.05	\$ 293,155.71	\$ 270,579.31	\$ 1,144,342.40	\$ 188,650.68	
22	\$ 260,435.80	\$ 185,561.50	\$ 1,601,242.01	\$ 530,850.66	\$ 892,196.05	\$ 1,786,981.80	\$ 208,470.32	\$ 333,631.97	\$ 288,918.41	\$ 266,668.33	\$ 1,127,801.95	\$ 185,923.91	
23	\$ 256,671.43	\$ 182,879.37	\$ 1,578,097.49	\$ 523,177.69	\$ 879,300.15	\$ 1,761,152.57	\$ 205,457.07	\$ 328,809.62	\$ 284,742.35	\$ 262,813.88	\$ 1,111,500.58	\$ 183,236.54	
24	\$ 252,961.48	\$ 180,236.01	\$ 1,555,287.50	\$ 515,615.62	\$ 866,590.66	\$ 1,735,696.68	\$ 202,487.37	\$ 324,056.97	\$ 280,626.66	\$ 259,015.14	\$ 1,095,434.84	\$ 180,588.02	
25	\$ 249,305.14	\$ 177,630.86	\$ 1,532,807.21	\$ 508,162.86	\$ 854,054.86	\$ 1,710,608.74	\$ 199,560.60	\$ 319,373.02	\$ 276,570.45	\$ 255,271.30	\$ 1,079,601.30	\$ 177,977.78	
26	\$ 245,701.66	\$ 175,063.37	\$ 1,510,651.85	\$ 500,817.82	\$ 841,720.12	\$ 1,685,883.42	\$ 196,676.13	\$ 314,756.77	\$ 272,572.87	\$ 251,581.59	\$ 1,063,996.63	\$ 175,405.27	
27	\$ 242,150.26	\$ 172,532.98	\$ 1,488,816.72	\$ 493,578.94	\$ 829,553.81	\$ 1,661,515.48	\$ 193,833.35	\$ 310,207.24	\$ 268,633.07	\$ 247,945.20	\$ 1,048,617.51	\$ 172,869.95	
28	\$ 238,650.20	\$ 170,039.17	\$ 1,467,297.21	\$ 486,444.70	\$ 817,563.35	\$ 1,637,499.76	\$ 191,031.66	\$ 305,723.47	\$ 264,750.22	\$ 244,361.37	\$ 1,033,460.68	\$ 170,371.27	
29	\$ 235,200.72	\$ 167,581.41	\$ 1,446,088.76	\$ 479,413.58	\$ 805,746.20	\$ 1,613,831.16	\$ 188,270.47	\$ 301,304.51	\$ 260,923.49	\$ 240,829.35	\$ 1,018,522.93	\$ 167,908.70	
30	\$ 231,801.11	\$ 165,159.17	\$ 1,425,186.82	\$ 472,484.08	\$ 794,099.86	\$ 1,590,504.68	\$ 185,549.19	\$ 296,949.42	\$ 257,152.08	\$ 237,348.37	\$ 1,003,801.09	\$ 165,481.73	
31	\$ 228,450.63	\$ 162,771.94	\$ 1,404,587.02	\$ 465,654.75	\$ 782,621.85	\$ 1,567,515.35	\$ 182,867.24	\$ 292,657.29	\$ 253,435.18	\$ 233,917.72	\$ 989,292.05	\$ 163,089.84	
32	\$ 225,148.58	\$ 160,419.22	\$ 1,384,284.97	\$ 458,924.13	\$ 771,309.75	\$ 1,544,858.32	\$ 180,224.06	\$ 288,427.19	\$ 249,772.00	\$ 230,536.64	\$ 974,992.71	\$ 160,732.52	
33	\$ 221,894.26	\$ 158,100.50	\$ 1,364,276.37	\$ 452,290.79	\$ 760,161.16	\$ 1,522,528.77	\$ 177,619.08	\$ 284,258.23	\$ 246,161.77	\$ 227,204.44	\$ 960,900.07	\$ 158,409.28	
34	\$ 218,686.97	\$ 155,815.30	\$ 1,344,556.97	\$ 445,753.33	\$ 749,173.71	\$ 1,500,521.98	\$ 175,051.76	\$ 280,149.53	\$ 242,603.72	\$ 223,920.41	\$ 947,011.11	\$ 156,119.62	
35	\$ 215,526.05	\$ 153,563.13	\$ 1,325,122.60	\$ 439,310.36	\$ 738,345.07	\$ 1,478,833.28	\$ 172,521.54	\$ 276,100.22	\$ 239,097.10	\$ 220,683.84	\$ 933,322.91	\$ 153,863.05	
36	\$ 212,410.81	\$ 151,343.51	\$ 1,305,369.14	\$ 432,960.52	\$ 727,672.96	\$ 1,457,458.06	\$ 170,027.89	\$ 272,109.44	\$ 235,641.16	\$ 219,494.05	\$ 919,832.57	\$ 151,639.09	
37	\$ 209,340.60	\$ 149,155.98	\$ 1,287,092.52	\$ 426,702.47	\$ 717,155.09	\$ 1,436,391.81	\$ 167,570.29	\$ 268,176.34	\$ 232,235.18	\$ 214,350.37	\$ 906,537.21	\$ 149,447.29	
38	\$ 206,314.77	\$ 147,000.06	\$ 1,268,488.75	\$ 420,534.86	\$ 706,789.26	\$ 1,415,630.05	\$ 165,148.21	\$ 264,300.09	\$ 228,878.43	\$ 211,252.12	\$ 893,434.02	\$ 147,287.16	
39	\$ 203,332.68	\$ 144,875.30	\$ 1,250,153.88	\$ 414,456.41	\$ 696,573.25	\$ 1,395,168.38	\$ 162,761.14	\$ 260,479.87	\$ 225,570.19	\$ 208,198.66	\$ 880,520.23	\$ 145,158.25	
40	\$ 200,393.69	\$ 142,781.26	\$ 1,232,084.02	\$ 408,465.81	\$ 686,504.91	\$ 1,375,002.47	\$ 160,408.58	\$ 256,714.86	\$ 222,309.78	\$ 205,189.34	\$ 867,793.10	\$ 143,060.12	
41	\$ 197,497.17	\$ 140,717.49	\$ 1,214,275.35	\$ 402,561.80	\$ 676,582.09	\$ 1,355,128.04	\$ 158,090.02	\$ 253,004.28	\$ 219,096.49	\$ 202,223.51	\$ 855,249.93	\$ 140,992.32	
42	\$ 194,642.53	\$ 138,683.54	\$ 1,196,724.08	\$ 396,743.13	\$ 666,802.70	\$ 1,335,540.87	\$ 155,804.97	\$ 249,347.33	\$ 215,929.65	\$ 199,300.55	\$ 842,888.05	\$ 138,954.40	
43	\$ 191,829.14	\$ 136,678.99	\$ 1,179,426.51	\$ 391,008.56	\$ 657,164.67	\$ 1,316,236.82	\$ 153,552.94	\$ 245,743.24	\$ 212,808.58	\$ 196,419.84	\$ 830,704.86	\$ 136,945.94	
44	\$ 189,056.43	\$ 134,703.42	\$ 1,162,378.95	\$ 385,356.88	\$ 647,665.94	\$ 1,297,211.80	\$ 151,333.47	\$ 242,191.24	\$ 209,732.62	\$ 193,580.76	\$ 818,697.76	\$ 134,966.50	
45	\$ 186,323.78	\$ 132,756.40	\$ 1,145,577.80	\$ 379,786.90	\$ 638,304.51	\$ 1,278,461.76	\$ 149,146.08	\$ 238,690.58	\$ 206,701.12	\$ 190,782.73	\$ 806,864.22	\$ 133,015.68	
46	\$ 183,630.64	\$ 130,837.53	\$ 1,129,019.50	\$ 374,297.41	\$ 629,078.38	\$ 1,259,982.74	\$ 146,990.31	\$ 235,240.52	\$ 203,713.44	\$ 188,025.13	\$ 795,201.72	\$ 131,093.06	
47	\$ 180,976.42	\$ 128,946.39	\$ 1,112,700.53	\$ 368,887.28	\$ 619,985.62	\$ 1,241,770.81	\$ 144,865.70	\$ 231,840.33	\$ 200,768.94	\$ 185,307.40	\$ 783,707.79	\$ 129,198.23	
48	\$ 178,360.57	\$ 127,082.58	\$ 1,096,617.44	\$ 363,555.34	\$ 611,024.28	\$ 1,223,822.13	\$ 142,771.79	\$ 228,489.28	\$ 197,867.01	\$ 182,628.95	\$ 772,379.99	\$ 127,330.78	
49	\$ 175,782.53	\$ 125,245.72	\$ 1,080,766.81	\$ 358,300.48	\$ 602,192.47	\$ 1,206,132.87	\$ 140,708.15	\$ 225,186.68	\$ 195,007.02	\$ 179,989.21	\$ 761,215.93	\$ 125,490.33	
50	\$ 173,241.75	\$ 123,435.40	\$ 1,065,145.29	\$ 353,121.56	\$ 593,488.32	\$ 1,188,699.30	\$ 138,674.34	\$ 221,931.80	\$ 192,188.37	\$ 177,387.62	\$ 750,213.23	\$ 123,676.48	
Total	\$ 12,653,174.53	\$ 9,015,434.88	\$ 77,795,735.60	\$ 25,791,177.92	\$ 43,347,006.67	\$ 86,819,832.74	\$ 10,128,451.54	\$ 16,209,382.92	\$ 14,036,991.39	\$ 12,955,979.64	\$ 54,793,830.13	\$ 9,033,042.54	

FSRM #1

Discounted Total Full Renovation #1 Cost												
Year	Altus	Columbus	Ft Sam	Goodfellow	Keesler	Lackland	Laughlin	Luke	Maxwell	Randolph	Sheppard	Vance
1	\$ 1,530,622.16	\$ 733,745.00	\$ 3,026,636.06	\$ 952,216.07	\$ 1,848,444.89	\$ 2,161,926.84	\$ 1,285,308.94	\$ 1,449,885.24	\$ 1,276,640.66	\$ 2,367,625.88	\$ 1,428,210.95	\$ 1,207,690.82
2	\$ 1,563,233.46	\$ 469,235.11	\$ 949,119.84	\$ 969,363.33	\$ 1,613,824.83	\$ 2,223,337.35		\$ 1,560,361.49	\$ 3,293,954.91	\$ 1,724,855.68	\$ 8,239,815.12	
3			\$ 979,698.39	\$ 732,779.23	\$ 1,803,005.05	\$ 5,060,871.83		\$ 1,573,674.77	\$ 1,295,710.86		\$ 5,008,567.10	
4			\$ 924,079.24	\$ 1,053,864.01	\$ 1,877,025.30	\$ 5,001,339.74		\$ 1,127,388.66			\$ 2,127,777.72	
5			\$ 910,686.79	\$ 1,095,209.47	\$ 1,849,991.66	\$ 2,653,237.79		\$ 1,385,335.63			\$ 5,106,303.26	
6			\$ 897,508.85	\$ 3,941,782.87	\$ 5,939,440.10	\$ 9,553,503.99					\$ 1,215,301.49	
7			\$ 1,921,347.07	\$ 2,050,895.96	\$ 5,853,361.26	\$ 12,430,474.77					\$ 4,054,189.95	
8			\$ 255,767.08	\$ 2,085,867.80	\$ 5,768,529.94	\$ 1,950,263.66					\$ 4,899,140.12	
9			\$ 7,501,237.50	\$ 1,879,972.71	\$ 3,105,306.25	\$ 3,618,050.58					\$ 2,937,145.74	
10			\$ 6,917,861.08			\$ 2,681,627.31					\$ 2,665,148.59	
11			\$ 12,498,187.58			\$ 1,824,492.93					\$ 3,267,918.29	
12			\$ 5,910,476.96			\$ 7,522,981.36						
13			\$ 7,575,460.20			\$ 1,837,480.29						
14			\$ 4,640,713.44			\$ 1,563,778.11						
15			\$ 1,067,955.84			\$ 1,540,076.08						
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Total	\$ 3,093,855.61	\$ 1,202,980.11	\$ 55,976,735.93	\$ 14,761,951.45	\$ 29,658,929.26	\$ 61,623,442.63	\$ 1,285,308.94	\$ 7,096,645.78	\$ 5,866,306.43	\$ 4,092,481.57	\$ 40,949,518.32	\$ 1,207,690.82
			AETC NPV =	\$ 226,815,846.84								
			@ 16% =	\$ 36,290,535.49								

Out-Year Renovation

Discounted Out-Year Renovation Cost												
Year	Altus	Columbus	Ft Sam	Goodfellow	Keesler	Lackland	Laughlin	Luke	Maxwell	Randolph	Sheppard	Vance
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31	\$ 987,785.52	\$ 473,521.62	\$ 1,953,236.64	\$ 614,511.72	\$ 1,192,892.11	\$ 1,395,197.38	\$ 829,472.87	\$ 935,682.03	\$ 823,878.80	\$ 1,527,945.06	\$ 921,694.55	\$ 779,382.10
32	\$ 1,008,831.19	\$ 302,820.42	\$ 612,513.56	\$ 625,577.68	\$ 1,041,480.28	\$ 1,434,828.60		\$ 1,006,977.77	\$ 2,125,750.60	\$ 1,113,133.94	\$ 5,317,556.67	
33			\$ 632,247.40	\$ 472,898.36	\$ 1,163,567.55	\$ 3,266,028.71		\$ 1,015,569.48	\$ 836,185.74		\$ 3,232,273.90	
34			\$ 596,353.64	\$ 680,110.11	\$ 1,211,336.45	\$ 3,227,609.73		\$ 727,559.17			\$ 1,373,159.28	
35			\$ 587,710.83	\$ 706,792.37	\$ 1,193,890.31	\$ 1,712,264.42		\$ 894,025.00			\$ 3,295,347.84	
36			\$ 579,206.46	\$ 2,543,825.74	\$ 3,833,011.89	\$ 6,165,344.50					\$ 784,293.63	
37			\$ 1,239,939.46	\$ 1,323,543.71	\$ 3,777,460.99	\$ 8,021,994.79					\$ 2,616,367.54	
38			\$ 165,059.04	\$ 1,346,112.75	\$ 3,722,715.18	\$ 1,258,600.76					\$ 3,161,655.30	
39			\$ 4,840,916.31	\$ 1,213,238.56	\$ 2,004,006.36	\$ 2,334,905.42					\$ 1,895,484.14	
40			\$ 4,464,434.91			\$ 1,730,585.57					\$ 1,719,951.05	
41			\$ 8,065,693.19			\$ 1,177,434.74					\$ 1,435,430.76	
42			\$ 3,814,320.55			\$ 4,854,948.69						
43			\$ 4,888,815.86			\$ 1,185,816.12						
44			\$ 2,994,879.90			\$ 1,009,182.68						
45			\$ 689,204.26			\$ 993,886.60						
46												
47												
48												
49												
50												
Total	\$ 1,996,616.71	\$ 776,342.04	\$ 36,124,532.02	\$ 9,526,610.99	\$ 19,140,361.12	\$ 39,768,628.69	\$ 829,472.87	\$ 4,579,813.44	\$ 3,785,815.14	\$ 2,641,078.99	\$ 25,753,214.65	\$ 779,382.10
			AETC NPV =	\$ 145,701,868.76								
			@ 16% =	\$ 23,312,299.00								

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REPORT DOCUMENTATION PAGE				Form Approved OMB No. 074-0188	
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1. REPORT DATE (DD-MM-YYYY) 23-03-2017		2. REPORT TYPE Master's Thesis		3. DATES COVERED (From – To) October 2015 – March 2017	
TITLE AND SUBTITLE United States Air Force Unaccompanied Housing Divestiture: An Economic Analysis				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) Gooden, Dustin L., Captain, USAF				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAMES(S) AND ADDRESS(S) Air Force Institute of Technology Graduate School of Engineering and Management (AFIT/EN) 2950 Hobson Way, Building 640 WPAFB OH 45433-8865				8. PERFORMING ORGANIZATION REPORT NUMBER AFIT-ENV-MS-17-M-188	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) The Directorate of Civil Engineers, Asset Management Division Mr. Frederick Arzt HQ USAF/A4CAH 1260 Air Force Pentagon Washington, DC 20030-1260 Frederick.k.arzt2.ctr@mail.mil				10. SPONSOR/MONITOR'S ACRONYM(S) HQ USAF/A4CA	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S) Distribution Statement A. Approved for Public Release; Distribution Unlimited	
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13. SUPPLEMENTARY NOTES This material is declared a work of the U.S. Government and is not subject to copyright protection in the United States.					
14. ABSTRACT The objective of this research is to determine potential cost savings associated with Air Force unaccompanied housing divestiture. This research uses Air Education and Training Command (AETC) installations as the data sample for the analysis, and will analyze the status quo, privatization, and identical FSRM options. With 16% of Air Force unaccompanied housing currently rated at various levels of inadequacy and the PRV for the inadequate housing at \$2,315,773,149.00, the costs associated with renovating the inadequate unaccompanied housing is substantial. Moreover, the inadequacy of unaccompanied housing is part of the Air Force's acceptance of risk in facilities and infrastructure to recapitalize and modernize aging aircraft and equipment (Wynne & Moseley, 2007). Compounding the current situation, post-sequestration budgets have a high degree of uncertainty with regards to funding (Harrison, 2013). A 50-year net present value cost estimation model, a comparative analysis of potential scenarios, and a risk analysis based on the Air Force risk assessment model was used to estimate costs and categorize potential risks involved with each option. The cost estimation model and risk matrix determined that identical FSRM is the best choice moving forward, with the lowest potential total cost of ownership and risk, to the Air Force.					
15. SUBJECT TERMS Privatization; Identical FSRM, Net Present Value; Economic Analysis; Unaccompanied Housing					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT UU	18. NUMBER OF PAGES 240	19a. NAME OF RESPONSIBLE PERSON Jared A. Astin, AFIT/CE
a. REPORT U	b. ABSTRACT U	c. THIS PAGE U			19b. TELEPHONE NUMBER (Include area code) (937) 255-5654, ext 3502 (NOT DSN) (Jared.Astin@afit.edu)

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Prescribed by ANSI Std. Z39-18