United States General Accounting Office

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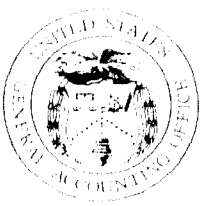
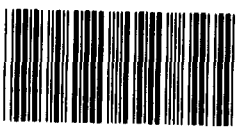
Report to the Congress and the Chairman, Defense Base Closure and Realignment Commission

May 1991

MILITARY BASES

Observations on the Analyses Supporting Proposed Closures and Realignments





GAO/NSIAD-91-224

GAO

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

Comptroller General
of the United States

B-234775

May 15, 1991

To the President of the Senate and the
Speaker of the House of Representatives

The Honorable James A. Courter
Chairman, Defense Base Closure and
Realignment Commission

The Secretary of Defense transmitted his recommendations for base closures and realignments to the Defense Base Closure and Realignment Commission on April 12, 1991. This report responds to the Defense Base Closure and Realignment Act of 1990 (P.L. 101-510) requirement that we provide the Congress and the Commission, by no later than May 15, 1991, a report on the recommendations and the selection process.

GAO's work provides a number of lessons learned for future studies of base realignments and closures. Most important is the need for (1) sufficient time to collect, analyze, and verify data and (2) adequate management controls over those tasks.

A supplement to this report, Military Bases: Letters and Requests Received on Proposed Closures and Realignments (GAO/NSIAD-91-224S, May 17, 1991), lists letters, requests, and supplementary materials we did not have time to address separately. We are providing those materials to the Commission for its information.

We are sending copies of this report to the Chairmen, Senate and House Committees on Armed Services; the Chairmen, Subcommittees on Defense, Senate and House Committees on Appropriations; the Secretaries of Defense, the Army, the Navy, and the Air Force; and other interested parties. We will make copies available to others on request.

This report was prepared under the direction of Donna M. Heivilin, Director, Logistics Issues, who may be reached on (202) 275-8412 if you or your staff have any questions. Other major contributors are listed in appendix II.

Frank C. Conahan

for Charles A. Bowsher
Comptroller General
of the United States

EXECUTIVE SUMMARY

PURPOSE

The Department of Defense (DOD) spends billions of dollars annually operating its military bases in the United States. Events taking place throughout the world and within the United States have caused a reevaluation of our military strategy, and U.S. forces are to be significantly reduced. DOD and the Congress both recognize that with a reduced force structure there is a need to close and realign military installations.

The Defense Base Closure and Realignment Act of 1990 (P.L. 101-510) established a new process for DOD base closure and realignment actions within the United States. The act established an independent Defense Base Closure and Realignment Commission and specified procedures that the President, DOD, GAO, and the Commission must follow, through 1995, in order for bases to be closed or realigned.

This report responds to the act's requirement that GAO provide the Congress and the Commission, by May 15, 1991, an analysis of the Secretary of Defense's April 12, 1991, recommendations of bases for closure and realignment and the selection process used. GAO also received numerous letters, requests, and materials in connection with this review from congressmen, state and local government officials, and private citizens; however, due to the lack of time available to respond to each of the issues raised, GAO has submitted the materials to the Commission for its use.

BACKGROUND

In 1988, the Secretary of Defense chartered the Commission on Base Realignment and Closure to review military installations within the United States for realignment and closure. Later that year the Commission recommended that 145 installations be closed or realigned. The Secretary of Defense and the Congress accepted all the Commission's recommendations.

The Secretary of Defense unilaterally recommended additional closures and realignments on January 29, 1990, as a result of the shrinking defense budget. The Congress subsequently passed the Defense Base Closure and Realignment Act of 1990, which halted any closure actions based on the January 29, 1990, list and required all installations in the United States to be compared equally against (1) criteria to be developed by DOD and (2) the future years' Force Structure Plan (fiscal years 1992 to 1997).

The final eight criteria against which the April 12, 1991, list of proposed military installation closures and realignments was to be measured included four related to the military value of the

installations and four others that addressed the number of years needed to recover the costs of closure and realignment; the economic impact on communities; the ability of both the existing and potential receiving communities' infrastructure to support forces, missions, and personnel; and the environmental impact. DOD guidance provided to the services directed that they give priority to the four criteria that addressed the military value of installations.

RESULTS IN BRIEF

GAO agrees that a reduced military force structure requires that military installations be closed and realigned. The DOD process, when properly implemented, allows for a reduction in the U.S. military base structure by emphasizing the military value of the installations. Indeed, DOD successfully nominated 43 bases for closure and 28 for realignment. This represents a significant start in the process to propose bases for closure and realignment every other year for the next 6 years.

The Army and the Air Force can document the use of DOD's Force Structure Plan and the four military value criteria in the selection process. GAO found some inconsistencies in the way they developed military value rankings for quantifiable attributes used to compare similar installations; however, GAO believes those inconsistencies were not significant. GAO considers the closure and realignment recommendations made by the Army and the Air Force to be adequately supported.

Although the Navy had insufficient documentation to support its efforts, which precluded GAO from evaluating the Navy's process, this does not mean that Navy bases should not be closed. However, since the Navy did not document the rationale for its decisions, GAO was unable to analyze its specific closure and realignment recommendations. As an alternative means of evaluating the Navy's recommendations, GAO looked at ship berthing capacity in comparison to the Force Structure Plan. After analyzing capacity data, GAO found that the Navy will have significant excess berthing capacity if only the recommended facilities are closed. GAO found that changes have occurred in the strategic homeporting concept, which when combined with excess available pier space for berthing ships, supports the recommendation for fewer Navy bases.

Although recognizing that differences exist in the composition and functions of each service's bases, GAO is concerned that DOD's guidance allowed estimating processes and cost factors used by the services to vary. GAO analyzed the sensitivity of years to recover closing costs (the projected payback period) for each closure or realignment to 50 percent and 100 percent increases in one-time costs. The analysis showed that the payback period for many of the recommendations did not substantially increase. There

are several recommended closure and realignment actions, however, where the payback is sensitive to one-time costs.

PRINCIPAL FINDINGS

The Army's Process and Recommendations

The Army established the Total Army Basing Study group in 1990 to develop a total Army basing strategy and then tasked it to recommend potential closures and realignments. The Army used a two-phased approach to evaluate potential bases for closure or realignment that was designed to treat all bases equally. In phase I, it categorized all its installations by major mission categories and evaluated their military value in quantitative terms. The Army Audit Agency was involved in the process to review and verify data collected for the quantitative analysis. In phase II, the Army used the Force Structure Plan, the phase I results, and the major commands' future plans. It also considered (1) the economic payback for possible alternatives and (2) the socioeconomic and environmental impacts on the communities involved in the final proposed closures.

Because the Army's process was well documented, which enabled GAO to evaluate the process, and the Army Audit Agency provided a check in the process, GAO believes that the resulting recommendations were well supported.

The Air Force's Process and Recommendations

The Air Force process was designed to treat all bases equally, and the selections were based on DOD's criteria and the Force Structure Plan. The process emphasized the first four criteria, which address military value. Also, the judgments of the Secretary of the Air Force and individual members of the Air Force Base Closure Executive Group, which was supported by a working group, were a part of the process.

The Air Force initially identified all Air Force-owned property within the United States and then excluded 35 active component bases from the process after doing a (1) capacity analysis and (2) mission-essential analysis. The 51 remaining active component bases were then rated on the basis of approximately 80 subelements for DOD's eight criteria. The Air Force also considered Reserve Component bases for potential closure or realignment using a slightly different process. As a result of these assessments, the Secretary of the Air Force then recommended closing 14 bases and realigning 1 base. GAO's analysis focused on the data supporting the closure or realignment decisions. Generally, GAO found that the rationale was adequately supported by documentation.

The Navy's Process and Recommendations

Due to inadequate documentation of the process used by the Navy, GAO was unable to independently evaluate the relative military value of the bases considered. Further, the Navy did not establish required internal controls to ensure the accuracy of the data used.

According to the Navy, it established a Base Structure Committee to conduct its closure process. The Committee decided that the input it received from its working group was biased in favor of keeping bases open. Thus, the Committee based its recommendations on information provided during meetings with various Navy and Marine Corps headquarters officials and representatives from various field organizations.

GAO's review of the Navy's ship berthing capacity studies found that there would be significant excess space beyond what the Committee calculated, even if the bases recommended for closure were included.

COBRA Model Used in Cost Savings Estimates

The revised Cost of Base Realignment Actions (COBRA) model addresses a full range of factors for estimating the costs, savings, and payback period related to closure and realignment actions. GAO found cases where the services used inaccurate data in the model. GAO also found that the cost estimating process ignored the cost of Medicare to the federal government. However, overall, GAO believes that the recommendations made for base closings and realignments offer an opportunity for substantial savings.

DOD Did Not Ensure Cost Comparability

Without DOD oversight of the COBRA cost estimating process, each service approached common problems in different ways. Although DOD called for submission of cost estimates expressed in fiscal year 1991 dollars, the services used budget data for other than 1991 dollars as their baselines for estimating costs and savings. Service costs and savings estimates, as well as payback calculations, did not consistently rely on fiscal year 1991 input data. These errors could reduce estimated annual savings and lengthen the payback period for several closures.

RECOMMENDATIONS

GAO recommends that the Secretary of Defense

-- require the Secretary of the Navy to submit to the Defense Base Closure and Realignment Commission specific details on the manner in which its Base Structure Committee compared bases to develop closure and realignment recommendations and

-- ensure the use of consistent procedures and practices among the services in future base closure and realignment reviews.

GAO also recommends that the Chairman, Defense Base Closure and Realignment Commission,

-- consider, in evaluating the Navy requirement for bases, the impact of excess space for ship berths on base requirements and

-- consider for all the services the effects of incorrect cost and savings estimates on all proposed base closures and realignments, using the results of GAO's sensitivity analysis.

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Abbreviations

AAA	Army Audit Agency
CHAMPUS	Civilian Health and Medical Plan of the Uniformed Services
COBRA	Cost of Base Realignment Actions
DOD	Department of Defense
MSA	Metropolitan Statistical Area
OEA	Office of Economic Adjustment
OSD	Office of the Secretary of Defense
RDT&E	Research, development, test & evaluation
TABS	Total Army Basing Study

CHAPTER 1

INTRODUCTION

The Department of Defense (DOD) and the Congress both recognize that realigning and closing military bases represent an opportunity to reduce defense spending. However, prior to 1988, conditions required to close a base were difficult to meet.

1988 RECOMMENDED CLOSURES AND REALIGNMENTS

In May 1988, the Secretary of Defense signed the charter establishing the first Commission on Base Realignment and Closure to review and recommend bases for realignment and closure. The Defense Authorization Amendments and Base Closure and Realignment Act (P.L. 100-526), dated October 24, 1988, provided procedures for recommending and carrying out these closures and realignments, including the Commission's reporting requirements and the process the Secretary of Defense and the Congress was to use to approve or reject the Commission's recommendations.

In December 1988, the Commission recommended the closure of 86 installations, partial closure of 5 others, and realignments of 54 others, meaning they would either experience an increase or decrease in size as units and activities were relocated. According to its report, the Commission's proposed closures and realignments would result in an annual savings of $693.6 million (fiscal year 1988 dollars) and a 20-year savings with a net present value of $5.6 billion (fiscal year 1988 dollars).

Subsequently, the Chairmen and Ranking Minority Members, Senate and House Committees on Armed Services, requested us to examine the Commission's methodology, findings, and recommendations. Basically, we found[1] that the Commission's methodology was sound but that the Commission had made some errors in implementing the methodology and overstated some estimates of annual savings. Our report also provided a number of lessons learned for future studies of base closures and realignments, including the need for adequate management controls and sufficient time to collect, analyze, and verify data. The Secretary of Defense and the Congress accepted all the Commission's recommendations.

1990 RECOMMENDED CLOSURES AND REALIGNMENTS

In January 1990, the Secretary of Defense recommended the closure of 35 additional installations and the realignment or reduction of forces at more than 20 other installations.

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[1]Military Bases: An Analysis of the Commission's Realignment and Closure Recommendations (GAO/NSIAD-90-42, Nov. 29, 1989).

The Office of the Secretary of Defense (OSD) did not provide specific written guidance to the services on how to evaluate bases but did give the services general oral guidance to consider regarding anticipated force structure and budget reductions in selecting candidate bases. As a result, the process used by the services varied. None of the services selected candidate bases using a process as comprehensive and well documented as the one followed by the 1988 Commission on Base Realignment and Closure. Instead, (1) the Navy based its selections on suggestions by knowledgeable officials in the Office of the Secretary of the Navy; (2) the Army based its selections on a task force study by the Army Deputy Chief of Staff for Operations and Plans that assessed the Army's base structure and planned force structure reductions; and (3) the Air Force directed its major commands to select candidate bases, and the commands made their selections based on various internal assessments. Further, the Navy did not develop cost and savings estimates prior to the Secretary's January 1990 announcement. The Army and the Air Force developed only preliminary cost and savings estimates, and they suspended efforts to refine the estimates with passage of the recent base closure and realignment legislation.

CURRENT EFFORTS TO RECOMMEND BASES FOR CLOSURE AND REALIGNMENT

Concerned about the Secretary's January 1990 recommendations, the Congress passed the Defense Base Closure and Realignment Act of 1990 (P.L. 101-510) requiring, in part, that all installations be equally considered for possible closure or realignment and halted any closure actions for bases on the January list that had more than 300 civilian employees. The act also established new procedures for closing or realigning military installations inside the United States, formed an independent Defense Base Closure and Realignment Commission, and established procedures for the Congress, the President, DOD, GAO, and the Commission to follow, through 1995, when closing or realigning bases.

Selection Criteria Were Established

The act specifically required the Secretary of Defense to propose selection criteria for DOD to use in recommending military installations within the United States for closure or realignment. The proposed criteria were to be used to evaluate bases for closure. In addition, the criteria were required to be published in the Federal Register to provide a period of public comment for at least 30 days.

The criteria published in the November 30, 1990, issue of the Federal Register were similar to the criteria established for the 1988 Commission on Base Realignment and Closure, with two exceptions. In its final report, the 1988 Commission indicated that (1) the military value of bases should help determine the

bases' relative ranking and (2) the payback period should not be limited to 6 years. Both those changes were incorporated in the November 30, 1990, proposed criteria. After receiving and considering public comments, DOD published the revised criteria (see table 1.1) in the February 15, 1990, issue of the Federal Register.

Table 1.1: DOD Criteria for Selecting Bases for Closure or Realignment

Category	Criteria
Military value	1. The current and future mission requirements and the impact on operational readiness of DOD's total force.
	2. The availability and condition of land, facilities, and associated airspace at both the existing and potential receiving locations.
	3. The ability to accommodate contingency, mobilization, and future total force requirements at both the existing and potential receiving locations.
	4. The cost and manpower implications.
Return on investment	5. The extent and timing of potential costs and savings, including the number of years, beginning with the date of completion of the closure or realignment, for the savings to exceed the costs.
Impacts	6. The economic impact on communities.
	7. The ability of both the existing and potential receiving communities' infrastructure to support

forces, missions, and personnel.

8. The environmental impact.

In a memorandum dated December 10, 1990, the Deputy Secretary of Defense provided policy guidance, record-keeping requirements, and time frames for submitting recommendations to the service secretaries, directors of defense agencies, and heads of other DOD components. It delegated authority to issue implementation instructions to the Assistant Secretary of Defense (Production and Logistics).

Between January 7, 1991, and March 26, 1991, the Assistant Secretary of Defense (Production and Logistics) issued four base closure policy memorandums to the service secretaries and directors of the defense agencies. The January memorandum provided the Office of the Secretary of Defense guidance regarding the act's requirement to evaluate all bases equally, regardless of whether the installation had previously been considered for closure or realignment.

The February memorandum (1) transmitted the final selection criteria to the service secretaries and directors of defense agencies and stated that priority should be given to the first four criteria related to military value; (2) required the services to develop and implement an internal control plan for their reviews; (3) directed the use of the Cost of Base Realignment Actions (COBRA) model to calculate return on investment; (4) authorized the use of cost factors specific to each service/agency; (5) directed the use of Office of Management and Budget (OMB) Circular A-94 guidance, which calls for a 10 percent discount rate and 0 percent inflation; (6) directed the use of an Office of Economic Adjustment computerized spread sheet in calculating the direct and indirect economic impact based on changes in direct employment at each base; and (7) provided a list of key environmental attributes that were to be considered for each base affected by closure and realignment actions.

The third memorandum, issued March 7, 1991, provided (1) guidance on what must be reported when multiple small proposed realignments exceed certain civilian employee thresholds; (2) guidance on calculations for land value cost and savings, force structure savings, and construction savings; (3) guidance on dealing with requests for information on any closure or realignment actions from local communities; (4) environmental impact considerations; and (5) the reporting format.

The fourth memorandum, issued March 26, 1991, revised the guidance issued on March 7, 1991, related to the reporting of multiple installation impacts to the Commission. The revised guidance directed DOD to submit to the Commission only those recommendations

for bases that exceed certain civilian employee thresholds or that depart from recommendations of the 1988 Commission. However, the Secretary of Defense subsequently decided to consider bases that did not exceed those thresholds when the proposed actions had undergone the services' detailed analyses and were based on the Force Structure Plan and DOD's final selection criteria.

In addition, the Assistant Secretary of Defense (Production and Logistics) formed a Base Closure Policy Committee consisting of key individuals at the assistant secretary or deputy assistant secretary level from each of the services and OSD. In addition to the Committee, the base closure office within the Office of the Assistant Secretary of Defense (Production and Logistics) assigned local representatives to each of the military service working groups to coordinate DOD's efforts.

Recommended Base Closures and Realignments

The act also required the Secretary of Defense to develop and transmit to the Commission and the Senate and House Committees on Armed Services, by April 15, 1991, a list of military installations inside the United States that were recommended for closure or realignment. The list was to be based on the published selection criteria and DOD's Force Structure Plan for future years (fiscal years 1992 to 1997).

Tables 1.2 and 1.3 identify the bases affected by the Secretary of Defense's recommended closure and realignment actions.

Table 1.2: Bases Recommended for Closure (by Service)

Service	Base/installation
Army	Ft. Benjamin Harrison, Indiana
	Ft. Chaffee, Arkansas
	Ft. Devens, Massachusetts
	Ft. Dix, New Jersey
	Ft. McClellan, Alabama
	Ft. Ord, California
	Sacramento Army Depot, California
	Harry Diamond Laboratory, Woodbridge Research Facility, Virginia
Air Force	Bergstrom Air Force Base, Texas
	Carswell Air Force Base, Texas
	Castle Air Force Base, California
	Eaker Air Force Base, Arkansas
	England Air Force Base, Louisiana
	Grissom Air Force Base, Indiana
	Loring Air Force Base, Maine
	Lowry Air Force Base, Colorado
	Moody Air Force Base, Georgia

	Myrtle Beach Air Force Base, South Carolina
	Richards-Gebaur Air Reserve Station, Missouri
	Rickenbacker Air Guard Base, Ohio
	Williams Air Force Base, Arizona
	Wurtsmith Air Force Base, Michigan
Navy	Chase Field Naval Air Station, Texas
	Hunters Point Annex, California
	Long Beach Naval Air Station, California
	Moffett Field Naval Air Station, California
	Orlando Naval Training Center, Florida
	Philadelphia Naval Shipyard, Pennsylvania
	Philadelphia Naval Station, Pennsylvania
	Sand Point (Puget Sound) Naval Station, Washington
	Tustin Marine Corps Air Station, California
	Whidbey Island Naval Air Station, Washington
	10 Research, Development, Test, and Evaluation (RDT&E) Engineering and Fleet Support activities
	Davisville Construction Battalion Center, Rhode Island

Table 1.3: Bases Recommended for Realignment (by Service)

Service	Base/installation
Army	Army Research Institute, Virginia
	Aviation Systems Command/Troop Support Command, Missouri
	Ft. Belvoir, Virginia
	Ft. Detrick, Maryland
	Ft. Monmouth, New Jersey
	Ft. Polk, Louisiana
	Harry Diamond Laboratories, Maryland
	Letterkenny Army Depot, Pennsylvania
	Rock Island Arsenal, Illinois
	White Sands Missile Range, New Mexico
Air Force	MacDill Air Force Base, Florida
Navy	Midway Island Naval Air Facility, Midway
	16 RDT&E Engineering and Fleet Support activities

OBJECTIVES, SCOPE, AND METHODOLOGY

The conference report on the Defense Base Closure and Realignment Act of 1990 directed us to monitor the activities, while they occurred, of the military services, the defense agencies, and DOD in their selection of bases for closure or realignment under the act. The act specifically required us to provide the Congress and the Defense Base Closure and Realignment Commission, by May 15, 1991, a report containing an analysis of the Secretary's recommendations and selection process.

We performed our work at DOD, the services' headquarters, various bases and installations, and several military commands. Visits to commands and installations were made prior to the announcement of the Secretary's recommendations to review the process leading up to those recommendations. We visited the following locations: Washington, D.C., metropolitan area; Tobyhanna Army Depot, Pennsylvania; Naval Station, Pearl Harbor, Hawaii; Naval Station, Norfolk and Naval Air Station, Norfolk, Virginia; Little Creek Naval Amphibious Base, Virginia; Naval Air Station, Oceana, Virginia; Davis-Monthan Air Force Base, Arizona; March Air Force Base, California; Strategic Air Command, Nebraska; the Air Training Command, Lackland Air Force Base, and Randolph Air Force Base, Texas; and the Tactical Air Command, Virginia.

At these commands and installations, we reviewed selected data pertaining to the evaluation of bases for closure and realignment and discussed the data and base closure decision process with responsible officials. In testing the internal controls used by the Army and the Air Force, we reviewed the Army Audit Agency's (AAA) validation of data at 16 Army installations and tested information obtained by a questionnaire distributed by the Air Force to its various commands. We also tested the reasonableness of the Air Force's analysis by creating our own rankings based on a numeric value system for the color-coded ratings assigned by the Air Force.

We checked the consistency of the approaches across the services and within the services to determine if inconsistencies in procedures could affect decisions on closures. In addition, we reviewed the services' estimates of costs and savings relating to the base closures and realignments. We did not verify the accuracy of the estimates; however, we reviewed the consistency of the services' approaches to estimating these costs and savings. We also performed a sensitivity analysis to determine where inaccuracies in cost estimates could affect decisions on closures.

Basically, our approach to assessing the Secretary of Defense's recommendations included reviewing the process used by the services, reviewing the consistency of the approaches, and checking the services' consideration of the Force Structure Plan and

published DOD selection criteria. The extent of our examination at all locations was limited by the short time frames available to do the work and comply with the May 15, 1991, reporting date.

The extent of our examination of the Navy's process was also limited by the lack of data provided by the Navy to document its process and the late date on which Navy officials provided materials and were available to meet with us in Washington, D.C.

We also received numerous letters, studies, and materials from a wide variety of interested parties, including Members of Congress, mayors, adjutants general, and private citizens. These requests and materials are included in a supplement[2] to this report. In some instances, the letters and materials added support to issues we were actively pursuing. The lack of time and resources available precluded us from responding separately to each of the letters; however, we believe that the letters and materials will be helpful to the Commission in its deliberations, and we are providing them to the Commission for its information.

We performed our work from January 14 to May 5, 1991, in accordance with generally accepted government auditing standards.

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[2]Military Bases: Letters and Requests Received on Proposed Base Closures and Realignments (GAO/NSIAD-91-224S, May 17, 1991).

CHAPTER 2

THE ARMY's BASE CLOSURE AND REALIGNMENT PROCESS AND ASSOCIATED RECOMMENDATIONS

The Army has proposed closure and realignment actions that will affect 18 installations. We found that the Army's methodology and techniques for selecting the installations provided a reasonable approach for identifying fighting and maneuver and training bases. The Army considered the future years' Force Structure Plan (fiscal years 1992 to 1997) and DOD's guidelines and final criteria in selecting these bases.

Because of the time constraints on our review, we were unable to determine whether the Army always followed its procedures in evaluating research and development and support activities for potential closure or realignment actions. It appeared that the Army had considered DOD's guidelines and selection criteria. However, because these activities do not lend themselves to direct correlation with force structure reductions, the Army made its assessment of these activities using various Defense Management Review initiatives and studies instead of the Force Structure Plan. We could not assess if consolidation decisions for these activities matched the Army's future plans because the plans are not precise and include some uncertainties.

In our review of the Army's efforts, we examined decisional data and documentation of discussions with decisionmakers and officials involved at each level of the decision-making process. We also accompanied AAA representatives to one installation to observe their data verification efforts.

THE ARMY's PROCESS

The Total Army Basing Study (TABS) group was established in 1990 to develop a basing strategy and was subsequently tasked with recommending potential base closures and realignments. The major Army commands and a number of Army Staff agencies assigned personnel to the TABS group. In addition, the TABS group was supported by a select advisory committee, made up of top Army personnel. AAA also reviewed and verified data collected for the quantitative analysis.

The Army's process for developing its recommendations consisted of two distinct phases. In phase I, the Army categorized its installations by major mission categories and evaluated their military value in quantitative terms. The major categories were fighting and maneuver, major training areas, training schools, command and control, and industrial activities. Also, the Army identified installations under the Corps of Engineers and the Army Reserve. The Army evaluated its reserve and National Guard

installations and concluded that no installations would be recommended for closure or realignment. In phase II, the Army identified closure and realignment alternatives using the future years' Force Structure Plan, the phase I results, and the major commands' "visions of the future." The Army assessed the environmental impact for bases retained for closure and realignment consideration after the Army's capacity analysis. In addition, the Army assessed the possible alternatives by considering their economic payback. However, socioeconomic impacts on the communities involved were only considered for the final proposed closures and realignments, which was in keeping with OSD guidelines.

To evaluate the installations' military value embodied in the first four DOD selection criteria, the Army developed five measures of merit and assigned weights to indicate the relative importance of each measure within the framework of military value. For example, mission essentiality was considered a more significant aspect of military value than expandability, thus it was weighted heavier. Table 2.1 lists the measures and their weighted values.

Table 2.1: The Army's Measures of Merit

Measure	Weight
Mission essentiality	250
Mission suitability	250
Operational efficiencies	150
Expandability	150
Quality of life	200
Total	1,000

Under each measure, the Army also developed quantifiable attributes that could be used to compare similar installations. For operational efficiency, expandability, and quality of life, the Army developed common attributes to be used by all installations. The major commands could add additional attributes to these measures that further defined the functions of their installations. For example, the Army Materiel Command added attributes covering (1) work force availability, (2) total unused maintenance capacity, and (3) total unused supply capacity to the standard attributes under the expandability measure. The attributes under the mission essentiality and suitability measures were developed by the major commands and tailored to the specific installation categories.

The attributes were also weighted to illustrate their relative importance within a measure of merit. The TABS group had final approval over the attributes and the weights assigned to the attributes by the major commands. For each attribute the TABS group (1) defined the attribute, (2) described the purpose of the

attribute, (3) identified the methodology for measuring the attribute, (4) identified the reference or source where data should be obtained, (5) determined the unit of measure, and (6) developed criteria for scoring the weighted value of the attribute among competing installations.

The TABS group used a software program called Decision-Pad to rate the installations within each mission category based on data collected by the major commands. The data included an installation's mission, tenants, and ability to expand. The rating was based on the data entered into Decision-Pad and the weights assigned to the attributes. The program considered these factors for all attributes when ranking installations from best to worst.

After the quantitative evaluation of the installations' military value, the TABS group began phase II by performing a capacity analysis, or screening procedure. The capacity analysis matched projected unit and mission-basing needs for the future years' Force Structure Plan, as well as the projected needs for other support activities, with the existing inventory of installations within each mission category to determine whether any excess capacity existed. The TABS group then excluded those installations that had (1) a high military value, (2) a unique mission (one-of-a-kind installation), (3) not been directly or indirectly affected by planned force structure changes, and (4) insufficient data upon which to make a sound decision at this time.

This procedure reduced the number of installations considered for possible closure or realignment to 24 under the major mission categories and 39 under the Corps of Engineers (see table 2.2).

Table 2.2: Capacity Analysis for Major Mission Categories

Fighting and maneuver installations	Training installations	Command & control installations	Industrial installations
Ft. Richardson	Ft. Ben Harrison	Ft. Devens	Detroit Arsenal
Ft. Drum	Ft. Huachuca	Ft. Gillem	Harry Diamond Laboratory
Ft. Ord	Ft. Gordon	Ft. Hamilton	Ft. Monmouth
	Ft. McClellan	Ft. Totten	Charles Price Support Center
Training areas			St. Louis Ammunition Plant
Ft. Dix			Picatinny Arsenal
Ft. A.P. Hill			Sacramento Depot
Ft. Chaffee			
Ft. Indiantown Gap			
Ft. McCoy			
Ft. Pickett			

The TABS group then reviewed these installations to make its closure and realignment recommendations. This included using information from the Force Structure Plan, military value analysis (phase I results), and the commands' "visions of the future." Once

these Army proposals were identified, the Army assessed their return on investment (payback period in terms of years) as well as operational (readiness, mission, and management efficiency), economic, and environmental impacts.

The TABS group provided its list of eight potential candidates for closure and a number of realignments to the Secretary of the Army for his consideration.[1] The Secretary of the Army accepted the TABS group's recommendations.

GAO's VIEWS ON THE ARMY's PROCESS AND RECOMMENDATIONS FOR CLOSURE AND REALIGNMENT

We found that the Army's two-phased decision process for evaluating and recommending installations for potential closure or realignment was generally a reasonable and adequately documented approach for recommending possible candidates to the Secretary of Defense.

The Army's Phase I Assessment of Military Value

The methodology and approach the Army used in its quantitative evaluation of the military value of its installations was comprehensive, reasonably detailed, and conformed to the requirements of the act. Although AAA found some errors in the Army's assessment of military value, the Army corrected most of these errors. In addition, the few data elements that were not changed were found to be insignificant in the final ranking of the installations.

Reasonable criteria developed for ranking installations

The Army did not attempt to produce an all-inclusive list of attributes within the measures of merit used in phase I. Rather, it limited the number of attributes that were developed to collectively depict the overall military value of each type of installation. All of the attributes were reviewed by senior leaders on the Army Staff, who represented all functional areas (operations, logistics, engineering, etc.). The facilities' attributes and data were also reviewed and validated by the Office of the Chief of Engineers.

The TABS group performed sensitivity analyses on the relative weights assigned to the measures of merit and their attributes to determine if any weights could substantially influence the ranking of installations. The group's analyses showed that, in general, changes to specific weights resulted in only minor adjustments to

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[1]Recommendations were also provided covering the Corps of Engineers; however, the Secretary of Defense decided not to include the civil functions of the Corps of Engineers under the base closure process.

installations' rankings. Thus, the TABS group concluded that the weights used to rank the installations were reasonable.

Provisions made to ensure accurate data

To ensure that the results of the installation evaluations developed with the Decision-Pad software were accurate and consistent across the major commands, the Army asked AAA to review data collected for the quantitative analysis. In response, AAA tracked data to the source documentation, performed limited tests to determine the appropriateness and reliability of the source documents, verified mathematical calculations, and evaluated the reasonableness of the procedures used to assess the military value of the installations. AAA conducted this work at 3 major commands and 16 selected installations (see table 2.3). At each of these installations, AAA validated about 75 percent of the 1,000 total points available for all attributes.

Table 2.3: Installations Where Data Were Reviewed by AAA

Fighting and maneuver installations	Training installations	Industrial installations	
		Depots	Commodity
Ft. Hood	Ft. Bliss	Anniston	Aberdeen
Ft. Lewis	Ft. Eustis	Red River	Detroit Arsenal
Ft. Ord	Ft. Huachuca	Tobyhanna	Natick R&D
Ft. Polk	Ft. McClellan	Sacramento	Redstone

AAA found some data errors in the quantitative data gathered by the major commands on their installations and some inconsistencies in procedures used by installations when obtaining and analyzing data for selected attributes. AAA's efforts were similar to what we would have performed and were done in accordance with generally accepted government auditing standards. In a few instances where we disagreed with AAA's calculations or methodological approach, we discussed them with the AAA team. In general, they agreed with our observations and incorporated our suggestions.

In our evaluation of the extent to which the Army incorporated AAA's findings and recommendations, we found that most of AAA's recommended data corrections were accepted by the Army. Our comparison of the TABS group's final rankings with AAA's showed that the rankings did not differ significantly (see table 2.4).

Table 2.4: Comparison of the Army's and AAA's Rankings of the Military Value of Installations by Mission Category

Installation	Ranking	
Fighting	Final	AAA
Ft. Hood	1	1
Ft. Lewis	2	2
Ft. Bragg	3	3
Ft. Stewart	4	4
Ft. Carson	5	5
Ft. Campbell	6	5
Ft. Riley	6	7
Ft. Polk	8	8
Ft. Wainwright	9	9
Ft. Ord	10	10
Schofield Barracks	11	12
Ft. Richardson	11	13
Ft. Drum	13	11

Installation	Ranking	
Training	Final	AAA
Ft. Bliss	1	1
Ft. Benning	2	2
Ft. Knox	3	3
Ft. Sill	4	4
Ft. Sam Houston	5	5
Ft. Gordon	6	6
Ft. Leonard Wood	6	7
Ft. Jackson	8	8
Ft. Rucker	9	10
Ft. Eustis	9	11
Ft. McClellan	11	9
Ft. Huachuca	12	13
Ft. Lee	13	12
Ft. Ben Harrison	14	14

Commodities	Final	AAA
Aberdeen	1	1
Redstone Arsenal	2	2
Ft. Monmouth	3	4
White Sands	3	3
Picatinny Arsenal	5	6
Ft. Detrick	6	5
Yuma	7	6
Detroit Arsenal	7	9
Dugway	9	8
Charles M. Price	10	10
Natick R&D	11	11
Vint Hill Farms	12	13
Harry Diamond Labs	12	12
Ft. Belvoir Fuels	14	14
St. Louis	15	15

Depots	Final	AAA
Anniston	1	1
Red River	1	1
Tooele	1	3
Tobyhanna	4	4
Letterkenny	5	5
Seneca	6	6
Sacramento	7	7
Blue Grass	8	8
Sierra	9	9
Savanna	10	10

Phase II Analysis

After ranking its installations within each mission category, the Army compared these installations to the future years' Force Structure Plan to determine which installations could be closed or realigned. The Army's examination considered such major factors as future force structure needs, deployability, training needs, and mission readiness. These factors were used by the TABS group to focus on (1) identifying installations to be excluded from further review, (2) identifying all candidates for possible closure or realignment, and (3) determining whether the costs of the closure or realignment would yield a reasonable return on investment.

Fighting installations

The Army has 13 fighting installations that provide the facilities and resources to house, sustain, maintain, train, and deploy major Army units. The final military value ranking for these installations is shown in table 2.4.

The Force Structure Plan shows a gradual reduction in the number of active divisions from 16 to 12 by 1995 and assumes that 3 divisions will be forward deployed outside of the continental United States. The force structure dictates that the Army must be able to house at least 9, but not more than 12, divisions within the United States. The Army currently has capacity to house 13 divisions.

On the basis of Force Structure Plan considerations, the Army excluded 8 of the 13 installations because it is currently housing and supporting a division being retained in the Force Structure Plan. For example, the 101st Airborne Division (Air Assault) is retained under the plan and is stationed at Ft. Campbell. The remaining five installations (Fts. Lewis, Ord, Drum, and Richardson and Schofield Barracks) were then reviewed further. Ft. Richardson and Schofield Barracks were subsequently excluded because of the geographic importance of their locations. Ft. Lewis was excluded because of its high military value ranking--2 among 13 fighting installations.

Fts. Ord and Drum, ranked 10 and 13, respectively, were then analyzed as potential candidates for closure. According to a TABS group official, one alternative considered was redesignating the 10th Light Infantry Division as the 7th Light Infantry Division and moving a brigade from Ft. Ord to Ft. Drum. The official said this alternative was uneconomical. Another alternative considered was closing Ft. Drum; however, Ft. Drum has significant up-front closure costs involving lease buyouts that would cost the Army about $261 million. Because of these high costs and uncertainty concerning the 10th Light Infantry Division, the option of closing Ft. Drum was deferred.

Ft. Ord was considered for closure because of its low military value ranking. However, to close Ft. Ord required the realignment of the 7th Light Infantry Division. The Army decided that realigning the division to Ft. Lewis would improve that unit's deployability to its area of responsibility and its operational security, as well as to fully utilize Ft. Lewis,[2] which was ranked 2 of the 13 fighting installations in the military value analysis.

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[2] The division at Ft. Lewis had been deactivated, leaving only the 199th Motorized Separate Infantry Brigade. As part of the Army's stationing plan, the 199th is to be realigned to Ft. Polk as part of the Joint Readiness Training Center.

Training installations

The Army has 14 training installations that provide initial entry training for new recruits and branch school training for military personnel that have completed basic training. (The schools' final military value ranking is shown in table 2.4.)

Because considerations for closures and realignments of installations, such as these training installations, that provide support functions to combat units shown in the Force Structure Plan do not lend themselves to direct correlation with force structure reductions, the Army used other studies and documents as a basis for consideration. One such study details how the Army would like to organize and manage its training installations and to develop mission doctrine in the future. The Army's plan to establish warfighting centers is a part of this future concept.

Eight of the 14 training installations were deferred from consideration under the base closure and realignment process, because the installations (1) currently support schools that are part of the Army's future concept to create warfighting centers or (2) have unique mission characteristics. For example, Ft. Benning houses the Infantry School, and Ft. Knox houses the Armor School. Under the Army's future concept, a Maneuver Warfighting Center would eventually be established to collocate the Armor and Infantry Schools. This would affect Fts. Benning and Knox and is under study. Ft. Rucker is currently the home of the Aviation School. This is a unique mission because Ft. Rucker has control of airspace that the Army says cannot be duplicated elsewhere within the Army.

Ft. Jackson provides almost half of the Army's basic training for soldiers and is the only installation capable of handling a rapid growth in Army basic training needs under emergency conditions. Therefore, it was excluded from consideration. Ft. Leonard Wood was also deferred because it is the planned location of the Maneuver Support Center that will train the Chemical, Engineering, and Military Police Branches together.

Fts. Gordon, McClellan, Huachuca, and Benjamin Harrison were studied as possible closure or realignment candidates. Several factors were deemed important for these installations, such as ranges, maneuver space, and expandability. Ft. Gordon was deferred because the Army considers it to be cost prohibitive to relocate the missions performed there. Ft. Huachuca was also deferred because the installation provides an electromagnetic-free environment that is vital to the testing of electronic and communication systems. Ft. Benjamin Harrison, which is recommended for closure, is the lowest ranked training installation in terms of military value. It is also located inside of Indianapolis and lacks the capability for expansion. According to the Army, the missions of Ft. Benjamin Harrison are less unique and do not require extensive facilities or acreage; therefore, they can be

easily realigned to other installations with minimal cost. However, closing Ft. Benjamin Harrison will alter a 1988 Base Closure Commission realignment recommendation, diverting the realignment of the U.S. Army Recruiting Command from Ft. Benjamin Harrison to Ft. Knox. A TABS group official said that the group considered placing the Soldier Support Warfighting Center at Ft. Benjamin Harrison; however, it was not economical.

According to the Army, Ft. McClellan is recommended for closure because most of the missions and facility requirements can be met elsewhere, and the base lacks extensive maneuver area. The Army believes that the Chemical School can be moved without serious problems. This move would be in accordance with the Army's plan to establish the Maneuver Support Center at Ft. Leonard Wood. The Defense Polygraph School move to Ft. Huachuca will collocate it with the Intelligence School.

According to a TABS group official, the Army has decided not to duplicate the Chemical Decontamination Training Facility at Ft. Leonard Wood because senior Army leaders do not believe that the facility is vital when considering the $30 million cost required to duplicate the facility. However, the Army plans to keep the facility in a "mothball" status so it can be reactivated if the Army decides to use it in the future.

A TABS group official said that prior to deciding to recommend closing Ft. McClellan, the group considered several alternatives, including collocating the Maneuver Support Center at Fts. Sill and Knox and realigning Ft. Leonard Wood to Ft. McClellan. According to the official, establishing the Maneuver Support Center at Ft. McClellan was uneconomical. Also, establishing the center at Fts. Sill and Knox did not support the Army's future concept.

Industrial installations

The Army's industrial installations category consists of two groupings of installations by similar mission: maintenance and supply depots and commodity installations. Depots provide maintenance, limited manufacturing capability, and supply distribution support for the Army, and some also have ammunition-related missions. The destruction of chemical weapons is also a function of select depots. Commodity installations provide industrial facilities, which include proving grounds, laboratories, and logistical management centers. Similar to the training category of installations, these installations do not lend themselves to direct correlation with the force structure reductions for closure and realignment considerations. (Their military value ranking is shown in table 2.4.)

The Army is currently responding to a congressional mandate to reduce its acquisition force, which includes research and development facilities, by 20 percent. The Army Materiel Command,

which has responsibility for all the industrial installations, has developed an operational plan, called "Vision 2000," that represents the Command's strategy to meet the shrinking force structure. The plan is not a detailed study but a framework of concepts presented in a briefing format.

The TABS group relied extensively on Vision 2000 for its review of the Command's installations. In addition, the TABS group considered various Defense Management Review Decisions that emphasized streamlining installation operations and recommendations developed by the Defense Depot Maintenance Council for commodity installations.

In its review of maintenance and supply depots, the TABS group excluded all of the depot installations, except Sacramento and Tobyhanna, because both are communications-electronics maintenance depots, from further closure review, and the other depots have critical and/or unique missions. For example, although Savanna Depot was ranked 10 of 10 in military value, it was excluded from further review because of its unique strategic materials mission. Tooele Depot was excluded because of its sole responsibility for the Army's tactical wheeled vehicle and power generation equipment.

In the commodity installations category, the TABS group deferred 9 of the 15 installations from further closure and realignment review, because the installations have critical missions or involved prohibitive costs. For example, Aberdeen Proving Ground provides testing facilities the Army considers critical. Also, Ft. Detrick was excluded because the Army believes it would be too expensive to relocate its biological warfare research mission.

The TABS group considered the recommended actions from the Defense Management Review Decisions, Vision 2000, and other studies to determine their feasibility for possible consideration under the closure and realignment process. For example, the TABS group developed and considered 12 possible alternatives within one aspect of Vision 2000 for commodity installation realignments. Alternatives the TABS group believed were logical and feasible and could be funded were incorporated into its closure and realignment recommendations.

On the basis of the Defense Depot Maintenance Council's study on ground communications and electronics, the TABS group determined that there was excess capacity for communications and electronics depot-level maintenance functions. Communications and electronics maintenance is done at two Army depots, Sacramento and Tobyhanna. Sacramento was recommended for closure because it ranks lower in military value than Tobyhanna, has higher wage rates, and would provide greater savings than Tobyhanna. Also, Tobyhanna has the existing capacity to absorb certain functions from Sacramento.

The return on investment was cited as a major factor in the decisions to realign selected missions within depots and commodities. The TABS group also considered the ability of the receiving locations to absorb the realigning mission or function. Ten major realignments involve commodity installations and depots. For example, the Harry Diamond Laboratory at Adelphi, Maryland, would become the flagship laboratory headquarters with the establishment of the Combat Materiel Research Laboratory, performing in-house basic and applied research for the Army.

Some concerns have been raised over the various realignments involving the depots and commodity installations. For example, concern was expressed about selective missions at Letterkenny Army Depot, Pennsylvania, moving to Rock Island, Illinois. Specifically, the concerns deal with whether the recommended realignment of the Systems Integration and Management Activity is rational and economical. According to a TABS group official, the Depot Systems Command and the Activity were recommended for realignment because they would provide services to the Industrial Operations Command being established at Rock Island. Because of time constraints, we were unable to review the numerous options involved in many realignments.

Major training areas

The Army has eight training area installations that provide facilities for active and reserve units to conduct large training exercises. The military value ranking for each of the eight installations is shown in table 2.5.

Table 2.5: Military Value Ranking of Major Training Areas

Installation	Ranking
Ft. Irwin	1
Ft. Dix	2
Ft. McCoy	3
Ft. Greely	4
Ft. Chaffee	5
Ft. A.P. Hill	6
Ft. Indiantown Gap	7
Ft. Pickett	8

Fts. Greely and Irwin were excluded from closure and realignment consideration because of their mission uniqueness. Ft. Greely is a critical cold weather testing and training site for the Army. Ft. Irwin ranked far above the other installations in military value and is the site of the National Training Center. The remaining installations' military value scores were close. Consideration for possible closure or realignment then included cost savings and the

ability to serve the needs of the reserve units that are the primary users of these remaining installations.

The TABS group decided to realign the remaining active component units at Fts. Dix and Chaffee. This action would bring the bases into alignment with the other installations, which are primarily used for reserve training. At Ft. Dix this action would allow the Army to reduce operating expenses by removing all active component tenants and selling those portions of the base that do not support reserve training. The Army temporarily stationed the Joint Readiness Training Center at Ft. Chaffee in 1986, although the base had been in a semi-active status until then. The TABS group recommended that the Center be realigned to Ft. Polk[3] to take advantage of that installation's facilities and terrain. This will allow the reserve units to have exclusive use of Ft. Chaffee's training area.

A TABS group official told us that before deciding to realign the Center to Ft. Polk, several alternatives were considered that included realigning the Center to Fts. Campbell, Stewart, Riley, McCoy, and Lewis and keeping it at Chaffee. He said that these alternatives were discarded because of operational and cost considerations.

The Army also studied Fts. Indiantown Gap, A.P. Hill, McCoy, and Pickett for possible closure or realignment. The Army decided that further study of the current system of allocating training opportunities was required. Also, additional analysis on the most cost-effective and management control structure is underway. Fts. Dix and Chaffee will be included in these ongoing studies. Any further closure or realignment actions under the base closure and realignment process were deferred until completion of these studies.

Command and control installations

The Army has 11 command and control installations, which support units that manage the day-to-day operations of manning, equipping, training, and sustaining the Army. The final military ranking of these installations is shown in table 2.6.

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[3]The 5th Mechanized Heavy Division is being realigned to Ft. Hood from Ft. Polk, thus allowing the Center and the 199th Separate Infantry Brigade to move to Ft. Polk.

Table 2.6: Military Value Ranking of Command and Control Installations

Installation	Ranking
Ft. Belvoir	1
Ft. Meade	2
Ft. Ritchie	3
Ft. Shafter	4
Ft. McPherson	5
Ft. Monroe	6
Ft. Gillem	6
Ft. Myer	8
Ft. Devens	9
Ft. Totten	10
Ft. Hamilton	11

The TABS group evaluated the Army's command and control installations' missions for both long-term and short-term impacts to determine whether any installations should be excluded from closure and realignment consideration. The first evaluation was performed to look at the strategic, or long-term, requirements of the Army. The analysis determined which installations had existing strategic support missions or facilities that were expected to be needed for the next 20 years. Any installation that was identified as having a mission or function that could not be interrupted was excluded from further review. The following installations were deferred at this stage of the analysis: Fts. Belvoir, Meade, Myer, Ritchie, and Shafter.

The second evaluation was an operational analysis that examined the remaining installations and determined how a realignment or closure would affect the day-to-day operations of the Army through fiscal year 1997. The TABS group specifically identified installations that supported commands or missions needed to manage the Army's planned 25-percent force structure reductions. It also looked for installations that had missions or functions that could not be easily relocated. This was essentially a second screening process to determine which bases would be excluded and which ones were likely candidates for closure or realignment.

Fts. Gillem, McPherson, Hamilton, Totten, and Monroe were deferred from consideration. Fts. Hamilton and Totten, although not involved in the management of the drawdown of the Army's forces and not critical to the mid-term transition management, were excluded because their missions are exclusively area-oriented and are not anticipated to be eliminated. Until a decision is made concerning the New York Area Command and its mission, these installations cannot be closed or realigned. Fts. McPherson and Gillem are considered a complex. Ft. McPherson is the headquarters of the

Forces Command. Because the Command would have to manage future force reductions and restructuring, the Army believes it would be imprudent to consider realigning the Command's headquarters at this time. The same decision also applies to Ft. Monroe, the headquarters for the Training and Doctrine Command. Installations with missions that require stability now could be candidates in fiscal years 1993 and 1995, when the Army's drawdown will almost be completed.

At the end of this stage of review, only Ft. Devens remained as a closure candidate. According to a TABS group official, prior to recommending Ft. Devens for closure, the group considered several alternatives, including the recommendation of the 1988 Base Closure Commission, to move the Army's Information Systems Command to Ft. Devens. However, this alternative is currently not economically feasible, because of proposed reductions in force structure since the 1988 recommendation. The Information Systems Command has reevaluated how it should be organized to support a reduced force strength. After determining that some of the 1988 recommendations affecting Ft. Devens were no longer economical, the Army determined that the units and missions at Ft. Devens were not site specific and could be relocated. Also, Ft. Devens was ranked 9 out of 11 in the military value ranking.

CHAPTER 3

THE AIR FORCE's BASE CLOSURE AND REALIGNMENT PROCESS AND ASSOCIATED RECOMMENDATIONS

The Air Force has proposed closures affecting 14 bases and the realignment of 1 other base. Our review found that the Air Force's process for evaluating installations was a generally reasonable approach for identifying potential closure or realignment candidates for the Secretary of Defense. Our assessment of the Air Force's efforts included reviews of decisional data and documentation and discussions with decisionmakers, including officials at each level in the decision-making process.

The Air Force process for identifying bases for closure and realignment was structured to treat all bases equally. The selections were based on the DOD future years' Force Structure Plan and the eight DOD selection criteria. The process emphasized the first four criteria, which address the military value of the bases. The judgments of the service's Base Closure Executive Group and the Secretary of the Air Force were also part of the process. Our review showed that the Air Force proposed closing bases with less military value than others, and these proposals were adequately documented.

THE AIR FORCE's PROCESS

The Air Force process was carried out by the Base Closure Executive Group appointed by the Secretary of the Air Force. The Executive Group consisted of five general officers and five Senior Executive Service-level career civilians with expertise across a wide range of areas. A Working Group, consisting of senior technical experts from the Air Staff and the Secretariat, supported the Executive Group. Directors of Plans and Programs from the major commands served as advisers to the Executive Group, and senior officers from the air reserve component also participated in the process. As a control measure, an auditor from the Air Force Audit Agency was assigned to review the process and procedures for consistency with the base closure law and DOD policy and to ensure that the data validation process was adequate.

The Air Force process for selecting bases for closure and realignment began with the identification of all Air Force-owned bases (active and reserve components) in the United States that had at least 300 civilian positions authorized. A total of 107 bases (86 active and 21 reserve) met the threshold for review. Those bases with similar missions were assigned to the following mission categories and subcategories: support, training, flying/strategic, flying/tactical, flying/mobility, flying/training, flying/other, other, and air reserve.

The Air Force excluded certain bases from the process after doing (1) a capacity analysis that considered DOD's force structure plans and (2) a mission-essential analysis. The capacity analysis compared the fiscal year 1991 force structure requirement (for example, number of aircraft, work loads) with the last quarter of the fiscal year 1997 requirement. Categories and subcategories having no significant excess capacity were excluded from further study. Those categories and subcategories were flying/mobility, flying/other, and the support category that included depots, product divisions, laboratories, and test facilities. As a result of the capacity analysis, 23 bases were excluded from further study. The mission-essential analysis resulted in the exclusion of 12 additional bases. These bases were excluded because they are in geographic locations where a base is required or they have essential unique military capabilities.

The 51 remaining active component bases were individually examined and rated on the basis of approximately 80 subelements developed by the Air Force of DOD's eight criteria. The subelements were specific to Air Force basing requirements and varied somewhat by category. For example, under the first DOD selection criterion (current and future mission requirements and the impact on operational readiness of DOD's total force), there were 21 subelements that provided specific data on each tactical flying base, such as the impact of weather on missions and air traffic delays.

The information for the subelements was gathered by the Working Group primarily from the major commands and the bases through a standard questionnaire. The major commands were responsible for completing the questionnaire and ensuring the accuracy of the data. As part of this process, copies of the completed questionnaire were sent to the individual bases for them to review and verify the information. The Working Group reviewed and critiqued the data.

In rating the bases, the Working Group compared the subelement data for each base to an Air Force-established standard for each subelement. Based on this comparison, all subelements for each base were given one of three color-coded ratings. A green rating was given if a base met or exceeded the subelement standard, a yellow rating was given if a base marginally met the standard, and a red rating was given if a base was significantly short of the standard. The information was then presented to the Executive Group for final ranking. As part of the final decisions, the Executive Group interfaced with the Working Group, challenging some of the data and changing some ratings for subelements based on the members' judgment and knowledge. However, our review revealed that changes were relatively infrequent. Furthermore, when the changes were made, they affected only 5 or 6 subelements among the 80 subelements.

On the basis of the information presented by the Working Group, the Executive Group agreed on an overall color-coded rating for each of the eight DOD selection criteria for each base. These overall ratings were based on the ratings assigned by the Working Group and the Executive Group's assessment of the relative importance of the criteria under various options, which placed priority on different aspects of military value. For example, one option placed priority on military value with emphasis on readiness and training; another option emphasized costs. For each option, the Executive Group ranked the bases.

A slightly different approach was used for the 21 reserve component bases. Air National Guard and Air Force Reserve component bases do not readily compete against each other. The bases, therefore, were initially examined to identify savings that could result from the realignment of guard and reserve units to nearby active installations. Those bases that offered significant savings were then evaluated using the final DOD criteria.

The option lists for the active component bases and the information on the reserve component bases were provided to the Secretary of the Air Force for his consideration, but specific bases were not recommended for closure by the Executive Group. The Secretary of the Air Force nominated 15 bases to the Secretary of Defense for closure and realignment.

Installations Selected for Potential Closure or Realignment Actions

The following sections summarize the Air Force process for each category of bases.

Other category

The other category included four installations that support dissimilar specialized functions.

-- Battle Creek Cataloging and Standardization Center, Michigan;

-- Peterson Air Force Base, Colorado;

-- Randolph Air Force Base, Texas; and

-- Scott Air Force Base, Illinois.

The Air Force concluded that these installations satisfactorily support their mission and closing them would be very costly with little or no savings. It was also noted that, according to the Force Structure Plan, the installations had no significant force structure reductions to justify a closure. We did not assess these justifications; however, the cost and savings information supports the decisions. For example, the Air Force estimates that it would

take more than 20 years to recover the closing costs for three of the four bases.

Training category

The training category included five bases that train Air Force personnel in a variety of technical skills.

-- Goodfellow Air Force Base, Texas;

-- Keesler Air Force Base, Mississippi;

-- Lackland Air Force Base, Texas;

-- Lowry Air Force Base, Colorado; and

-- Sheppard Air Force Base, Texas.

Some of the more important elements cited by the Air Force as required by these bases include adequate classrooms, training facilities, and administrative space. Because of planned reductions in requirements for enlisted personnel, the Air Force decided to close one of the five training centers.

The Executive Group presented its color-coded ratings for these bases for each of the eight DOD selection criteria to the Secretary of the Air Force for his consideration. The ratings emphasized the readiness and training aspects of the military value criteria.

Overall, Goodfellow Air Force Base and Lowry Air Force Base rated low in the first three criteria, which address military value of the installation. Goodfellow showed a faster payback and less closing costs. Lowry rated lower in the last three criteria, which deal with the impact of the base closure or realignment. Based on the Secretary of the Air Force assessment of these ratings, he selected Lowry for closure. According to the Chairman of the Executive Group, other considerations that supported his decision included (1) land sales at Lowry have the potential for a better return than at Goodfellow; (2) training courses taught at Lowry were better candidates for contracting out than the intelligence-type courses taught at Goodfellow; and (3) because Lowry is a larger base than Goodfellow, the Air Force would eliminate more excess capacity.

Flying/training subcategory

The flying/training subcategory included five bases that provide undergraduate pilot training.

-- Columbus Air Force Base, Mississippi;

-- Laughlin Air Force Base, Texas;

-- Reese Air Force Base, Texas;

-- Vance Air Force Base, Oklahoma; and

-- Williams Air Force Base, Arizona.

According to the Air Force, some of the more important elements required by these bases include three parallel runways, good flying weather, extensive airspace with relatively unrestricted access, and minimal encroachment. Because of planned reductions in requirements for pilots, the Air Force determined that it could close one of these bases.

Using the data collected on the subelements and the ratings assigned by the Working Group for each subelement and its subjective judgments, the Executive Group assigned an overall rating for each of the eight criteria. These overall ratings, which were presented to the Secretary of the Air Force for his consideration, emphasized the readiness and training aspects of the military value criteria.

Overall, Williams Air Force Base, which ranked lowest in three of the eight criteria, rated lower than the other four bases in this category. The Secretary of the Air Force selected Williams for closure.

Flying/strategic subcategory

The flying/strategic subcategory included 21 bases that support both nuclear and conventional bomber missions, as well as tanker, missile, and reconnaissance missions.

-- Barksdale Air Force Base, Louisiana;

-- Carswell Air Force Base, Texas;

-- Dyess Air Force Base, Texas;

-- Ellsworth Air Force Base, South Dakota;

-- Grand Forks Air Force Base, North Dakota;

-- Grissom Air Force Base, Indiana;

-- Loring Air Force Base, Maine;

-- March Air Force Base, California;

-- Minot Air Force Base, North Dakota;

-- Plattsburgh Air Force Base, New York;

-- Beale Air Force Base, California;

-- Castle Air Force Base, California;

-- Eaker Air Force Base, Arkansas;

-- Fairchild Air Force Base, Washington;

-- Griffiss Air Force Base, New York;

-- KI Sawyer Air Force Base, Michigan;

-- Malmstrom Air Force Base, Montana;

-- McConnell Air Force Base, Kansas;

-- Offutt Air Force Base, Nebraska;

-- Whiteman Air Force Base, Missouri; and

-- Wurtsmith Air Force Base, Michigan.

According to the Air Force, some of the more important elements required by these bases include peacetime and wartime tanker access, access to bomber ranges, and minimum traffic encroachment. Because of the reduced force structure requirements for bombers and tankers, the Air Force determined that it could close six strategic air bases.

Because of the large number of bases in this subcategory, the bases were ranked under six different options emphasizing various aspects of military value, such as readiness and training, future needs, and cost data. The sixth option placed emphasis on the base wartime mission. For each option, the bases were placed into three groups in order of desirability for retention: top, middle, and bottom.

The Executive Group presented these six options to the Secretary of the Air Force. The Secretary selected the most inclusive option that placed priority on military value with emphasis on readiness, training, future mission, and cost data. The bases in the bottom group under this option were Carswell, Eaker, Grissom, Loring, Plattsburgh, and Wurtsmith. According to Air Force officials, because Loring and Plattsburgh are in the northeast and closing both could severely hamper the execution of the single integrated operational war plan, the Secretary recommended only one, Loring Air Force Base, for closure. Although the DOD base closure and realignment report recommended that Loring be closed due to its limited peacetime tanker utility and access to bombing ranges and the condition of its facilities, the Working Group described additional considerations influencing the Secretary's decision.

These were the less desirable weather conditions, condition of ramp space, quality of life, and flexibility of operations associated with Lowry. Since the Air Force's capacity analysis indicated one more base could be closed, the Secretary then chose the lowest ranked base in the middle group, Castle Air Force Base, for closure.

Flying/tactical subcategory

The flying/tactical subcategory included 16 bases that provide trained combat ready aircrews, aircraft, and support personnel for deployment in support of theater war plans and contingency operations.

-- Bergstrom Air Force Base, Texas;

-- Cannon Air Force Base, New Mexico;

-- Davis-Monthan Air Force Base, Arizona;

-- Eielson Air Force Base, Alaska;

-- England Air Force Base, Louisiana;

-- Holloman Air Force Base, New Mexico;

-- Homestead Air Force Base, Florida;

-- Langley Air Force Base, Virginia;

-- Luke Air Force Base, Arizona;

-- MacDill Air Force Base, Florida;

-- Moody Air Force Base, Georgia;

-- Mountain Home Air Force Base, Idaho;

-- Myrtle Beach Air Force Base, South Carolina;

-- Seymour Johnson Air Force Base, North Carolina;

-- Shaw Air Force Base, South Carolina; and

-- Tyndall Air Force Base, Florida.

Some of the more important elements cited by the Air Force as required by these bases include low altitude training routes, good flying weather, and minimum traffic congestion and delays. Because of the planned reductions in requirements for fighter aircraft, the Air Force determined that it could close five tactical bases.

The Executive Group used a method similar to the one it used for the strategic subcategory to rate, rank, and group the tactical bases under the various options, which mirrored most of the options considered for strategic bases. However, the tactical bases were not rated for the option that emphasized wartime mission.

The Executive Group presented these five options to the Secretary of the Air Force, and the Secretary again selected the most inclusive option that placed priority on military value with emphasis on readiness, training, future mission, and cost. Bases under this option with the lowest rankings were Bergstrom, England, Homestead, Moody, and Myrtle Beach. The Secretary believed that Homestead Air Force Base, Florida, could not be closed due to its key geographic location and its support of drug interdiction efforts along the southeastern coast. He then proposed the partial closure of MacDill Air Force Base, Florida. Under the partial closure, MacDill's aircraft will relocate, the runway will be shut down, and the base will become an administrative base. The Chairman of the Executive Working Group believes this proposal makes sense and still reaches the Air Force's goal of reducing its structure by five tactical bases.

GAO's ANALYSIS OF THE AIR FORCE PROCESS

In our review of the Air Force's process for identifying potential installations for closure or realignment, we

-- verified that the 107 bases selected by the Air Force were the only ones to meet its threshold for review (300 civilian authorizations);

-- independently conducted the capacity analysis that excluded two flying categories and the support category from further consideration and found the Air Force analysis to be reasonable and in compliance with DOD instructions;

-- found no reason to question the 12 bases excluded on the basis of the Air Force's mission-essential analysis; and

-- reviewed a judgmental sample of major commands' responses to the data collection questionnaire at four bases and found that the responses provided by the major commands were generally consistent with data available at the bases.

Based on our review, we found that the Air force generally treated all bases equally and considered the DOD selection criteria and the future years' Force Structure Plan. However, in computing costs and savings for the proposed closures and realignments, the Air Force process included an assessment of the condition of all bases' facilities as of January 1991 and the cost to bring the facilities up to the top condition code. We noted that it did not fully

consider the impact of ongoing military construction improvements when evaluating facilities at the bases. As a result, the condition of facilities at bases with ongoing upgrade and construction projects may not have been appropriately reflected in the assessment. The Chairman of the Executive Group told us the Air Force was aware of this, but that it would not be that significant to have included the data because construction costs were relatively small and would not have affected the ratings.

GAO's ANALYSIS OF THE AIR FORCE RECOMMENDATIONS FOR CLOSURE AND REALIGNMENT

Shortly after DOD announced its closures and realignment recommendations, the Air Force provided us with the supporting documentation for its analyses and recommendations. We focused our analysis on the supporting data for the justifications given for the 13 active bases, as reported by the Air Force. We first reviewed the subelement ratings for the bases to see if they were consistent with the justification rationale. We then reviewed the backup data for those critical subelements to see if they supported the Executive Group's ratings.

For the most part, the Air Force's rationale for closures and the one realignment was supported by backup documentation. A few problems, however, were noted. For example, for the Williams closure, the backup data for the existing and future airspace encroachment subelements showed that the Air Training Command gave the base higher ratings in these areas than the rating assigned by the Executive Group. The minutes of the Executive Group meetings showed that the ratings for these subelements (6 of the 80 subelements) were changed based on the Executive Group's personal expertise and knowledge concerning encroachment problems at Williams that went back over 20 years.

In another case, we noted differences of opinion among the Strategic Air Command, the Working Group, and the Executive Group. Even though the Air Force organizations did not disagree with the accuracy of the data, there were differences of opinion when judgments were used to determine the color codings of some subelements. For instance, the Command believed that Castle Air Force Base should receive a green color code for the six subelements related to existing and future local/regional community encroachment. The Working Group, on the other hand, agreed with the Command for two of the six subelements and rated Castle green, but disagreed and rated Castle yellow for the remaining four subelements. The Executive Group rated Castle yellow for all six subelements--existing accident potential zones, noise zones, and environs air space, as well as future accident potential zones, noise zones, and environs air space.

We tried to recreate the Executive Group's analysis but could not. Consequently, we created rankings by assigning numeric values to

the Executive Group's color codings for each subelement. Our analysis of these rankings and other information from the Air Force backup materials regarding attributes that the Executive Group considered important indicates that the bases proposed for closure were adequately documented.

Air Reserve and Air National Guard

The Air Force said that, although the Force Structure Plan did not reveal the need for significant reductions in the Air Reserve component force structure, it decided to assess these bases for cost-effective realignments to active air bases. Table 3.1 shows the bases considered in this category.

Table 3.1: Bases Considered in the Air Reserve Component Category

Air National Guard	Air Force Reserve
Boise Air Terminal, AGS, Idaho	Dobbins ARB, Georgia
Buckley AGB, Colorado	General Mitchell IAP, ARS, Michigan
Fresno Air Terminal, AGS, California	Greater Pittsburgh IAP, ARS, Pennsylvania
Great Falls IAP, AGS, Montana	Minn./St. Paul IAP, ARS, Minnesota
Martin State Airport, AGS, Maryland	Niagara Falls IAP, ARS, New York
Otis AGB, Massachusetts	O'Hare IAP, ARS, Illinois
Portland IAP, AGS, Oregon	Richards-Gebaur ARS, Missouri
Rickenbacker AGB, Ohio	Westover ARB, Massachusetts
Selfridge AGB, Michigan	Willow Grove ARS, Pennsylvania
Stewart IAP, AGS, New York	Youngstown MPT, ARS, Ohio
Tucson IAP, AGS, Arizona	

Legend

AGB = Air Guard Base
AGS = Air Guard Station
ARB = Air Reserve Base
ARS = Air Reserve Station
IAP = International Airport
MPT = Municipal Airport

The Air Reserve component bases were evaluated under a different process than active Air Force bases. First, all of the 21 guard and reserve bases were examined to identify savings that could result from the realignment of guard and reserve units to nearby active installations. The Air Force Reserve and Air National Guard briefed the Executive Group on each base. These briefings included information on manpower numbers, operations and maintenance costs, and relocation costs. On the basis of the briefings, the Executive Group directed the components to provide additional data on certain bases, including Rickenbacker Air Guard Base, Ohio, and Richards-Gebaur Air Reserve Station, Missouri. These two bases were eventually proposed to the Secretary of Defense for closure consideration.

According to the Air Force, Richards-Gebaur has paid most of the airfield operating costs, even though it is operated by the Kansas City Department of Aviation and Transportation. When the joint use arrangement was initiated in the late 1970s, the Air Force anticipated that an economically viable civil airport would develop, and cost to the Air Force would decrease. Since this has not occurred, relocating the reserve station to nearby Whiteman Air Force Base, Missouri, and to Peterson Air Force Base, Colorado, would produce significant cost savings. The Air Force estimates that the support costs for the station are about $11 million, the moving cost would be $54 million, and the annual savings would be about $13 million. The Executive Group reasoned that the move to Whiteman is within the same recruiting area.

The proposal to close Rickenbacker and relocate it to Wright-Patterson Air Force Base, Ohio, was based on its high operating costs. According to Air Force data, the annual base operating costs are about $12.5 million, compared to an estimated operating cost at Wright-Patterson of about $4.2 million. The National Guard Air Staff and Civil Engineers Office submitted two very different estimates for closing costs: $83 million and $33 million, respectively. Considering the data reviewed and its belief that the relocation would enhance recruiting potential, the Executive Group nominated the base for closure. There was no COBRA analysis prepared for this or the Richards-Gebaur closure.

CHAPTER 4

THE NAVY's BASE CLOSURE AND REALIGNMENT PROCESS AND ASSOCIATED RECOMMENDATIONS

We were unable to conduct an extensive review of the process the Navy used to recommend bases for closure or realignment, because the Navy did not adequately document its decision-making process or the results of its deliberations. In addition, the Navy did not establish an internal control plan to ensure the validity and accuracy of information used in its assessment as required by OSD.

Due to the limited documentation of its process, we also could not assess the reasonableness of the Navy's recommendations for closures. However, we reviewed and recalculated the Navy's ship berthing capacity analysis and found that excess capacity would remain, even with the closure of recommended bases.

THE NAVY's PROCESS AS DESCRIBED BY NAVY OFFICIALS

The Navy's Base Structure Committee, which was charged with making base closure and realignment recommendations, began its review of the Navy's basing structure in late January 1991. However, the Committee did not fully explain its process to us until May 7, 1991, when it informed us that after review of data prepared by its working group, the Base Structure Committee decided that much of the data were biased in favor of keeping bases open and were inadequate for an objective assessment of the Navy's basing needs. Its review, therefore, emphasized a series of briefings and meetings attended by Committee members, Navy and Marine Corps headquarters officials, and representatives of field activities. According to Committee members, decisions made during the process were sometimes made in the presence of everyone in the meetings and were clear to everyone in attendance. In other cases, the decisions were made by the Committee in closed executive sessions. Based on this review, the Committee proposed closure and realignment actions to the Secretary of the Navy on March 21, 1991.

We reviewed the charts that were used in the presentations to the Committee. These charts were generally in outline form. Our review of this information showed that presentations were organized by 23 Navy and 6 Marine Corps categories representing the various Navy functions and missions. For example, the category "naval stations" included bases that have deep water harbors and piers and serve as home bases for Navy surface ships and aircraft carriers. The category "naval air stations" included bases that have runways and hangars and serve as home bases for aircraft. Other categories included submarine bases, shipyards, aviation depots, supply centers/depots, Marine Corps bases, Marine Corps air stations, reserve centers, and RDT&E activities.

The Base Structure Committee told us that a capacity analysis was then discussed for each functional category, which compared the 1997 force structure facility requirements against the existing inventory. Critical factors were identified for each category and served as units of measure for capacity. For example, pier space was used as the primary unit of measure for naval stations, and airfield apron and hangar space were used for naval air stations.

Of the eight categories of bases the Committee retained for further closure and realignment analysis, four were retained because the Base Structure Committee identified potential excess capacity: (1) naval stations, (2) naval air stations, (3) shipyards, and (4) Marine Corps air stations. Two other categories--the training and construction battalion centers categories--were retained for further analysis, because they showed potential excess capacity in segments of the overall categories. The medical category was also retained because of the link between medical facilities and major installations that were being evaluated for closure or realignment. Finally, the RDT&E category was retained for analysis based on a mandated requirement to reduce personnel by 20 percent.

A military value rating was then assigned by the Base Structure Committee to each base in all the categories being analyzed except for the medical category.[1] Committee members told us that they rated each installation using the first four DOD selection criteria, which addressed military value, and then they independently assigned each installation an overall color-coded rating.

Bases receiving an overall green rating were excluded from further study, according to Committee members. For example, in the naval stations category the bases receiving an overall green were Coronado, Guam, Ingleside, Little Creek, Mayport, Mobile, New York (Staten Island), Norfolk, Pascagoula, Pearl Harbor, Puget Sound/Everett, and San Diego. The Committee continued to evaluate bases that were given an overall rating of yellow or red. Additional bases were excluded from further review because of their unique assets, geographic location, strategic importance, or operational value, leaving 19 bases and the RDT&E category to be evaluated for closure.

Committee members told us they then performed a "quick estimate" cost-benefit analysis of each of the remaining bases to determine the feasibility of closing them. After making its final decisions, a full COBRA analysis for those closure candidates was conducted.

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[1]Three hospitals were reviewed because three installations with hospitals were being considered for closure: Orlando Naval Training Center, Whidbey Island Naval Air Station, and Long Beach Naval Station.

Local economic and environmental impact analyses were also done for the closure candidates.

The Committee proposed closing 11 bases and 10 RDT&E facilities. It also recommended that 1 base and 16 RDT&E facilities be realigned. In addition, three hospitals were proposed to be closed as a result of the Committee's decisions.

GAO's VIEWS ON THE NAVY's PROCESS

In addition to the limitations placed on our review by the lack of adequate documentation, we identified three problems with the Navy's process. First, due to the lack of supporting documentation, we could not determine the basis for the Committee's military value ratings for Navy installations. In late March, we received selected data given to the Committee by its Working Group. This information was provided to us, but we were not advised until May 7, 1991, that the Committee had decided that much of this data were biased in favor of keeping bases open. In mid-April, the Base Structure Committee provided us with four additional volumes of material that consisted primarily of briefing charts that were basically outlines of matters and data to be discussed, without any explanation or supporting data. Also, Committee members said they did not prepare minutes of their deliberations.

Second, we identified apparent inconsistencies within the Committee's internal rating process. For example, the Committee had given identical ratings to two naval stations on each of the first four DOD selection criteria but had assigned an overall rating of green to one and yellow to the other. Similarly, the Committee had assigned identical ratings to six naval air stations for the first four DOD selection criteria. Four bases were assigned an overall rating of yellow and two an overall rating of green. These inconsistencies are significant because any base given an overall rating of green, based on the first four DOD selection criteria, was excluded from further closure or realignment consideration. In explanation, Committee members stated that "not all yellows are equal" and "not all greens are equal." Since the Committee did not document these differences, we could not determine the rationale for its final decisions.

Lastly, although required by OSD policy guidance to develop and implement an internal control plan for its base structure reviews, the Navy did not assign responsibility for developing and implementing such a plan.

GAO's VIEWS ON THE CLOSURE AND REALIGNMENT RECOMMENDATIONS

Because the Committee did not document the rationale for its decisions, we could not comment on the Committee's closure and realignment recommendations based on the process. As an

alternative, we looked at ship berthing capacity of naval stations in comparison to the Force Structure Plan because naval stations are a major category of the Navy's facilities. Also, we have conducted prior work and have ongoing work related to homeporting needs. Data obtained from the Navy's Assistant Chief of Naval Operations (Surface Warfare) showed that the most appropriate indicator for naval station requirements is ship berthing capacity. An analysis of the capacity data showed the Navy will have excess capacity remaining if only the four recommended naval stations are closed.

The Navy's capacity analysis indicates an inventory of 257.6 thousand feet of berthing (KFB) at naval stations and a requirement of 174.2 KFB, leaving an excess of 83.4 KFB. This excess represents the capacity at naval stations worldwide and also includes some inadequate berthing space. In addition, 14.5 KFB of berthing space is available at facilities other than naval stations.

When we subtracted the 75.2 KFB identified with space associated with (1) overseas facilities, (2) recommended closures, and (3) inadequate berthing facilities, 22.7 KFB of excess berthing capacity remains (see table 4.1).

Table 4.1: Analysis of Excess Ship Berthing Capacity

	Berthing capacity (KFB)	
Excess disclosed by Navy capacity analysis		83.4
Plus		
Space available at other naval facilities		14.5
Minus		
Space at overseas facilities	26.4	
Space associated with 4 proposed closures	29.6	
Space that is inadequate	19.2	(75.2)
Total excess berthing capacity		22.7

We recognize that the Navy cannot reduce the excess capacity to zero because of various factors, such as the depth of water at locations that may limit the types of ships that can be berthed. However, in light of the amount of excess capacity the Navy has to berth ships, additional closures could be considered.

Included in the Navy's inventory is 18.3 KFB associated with the four new strategic homeports currently under development and one that recently opened (see table 4.2). The Committee said that these ports were not recommended for closure because they received overall green ratings and because of quality of life considerations.

Table 4.2: Ship Berthing Capacity at Proposed Strategic Homeports

Location	Berthing capacity (KFB)
Everett, Washington	3.0
Staten Island, New York	6.8
Ingleside, Texas	5.4
Mobile, Alabama	1.7
Pascagoula, Mississippi	1.4
Total	18.3

Four of these facilities have not been completed and will require additional military construction funding. In addition, changes have occurred in the strategic homeporting concept. As a result,

these future facilities, along with other existing naval stations, might provide additional opportunities to reduce excess ship berthing capacity.

CHAPTER 5

OVERVIEW OF BASE CLOSURE AND REALIGNMENT COSTS AND SAVINGS ESTIMATES

OSD directed the services to use the Cost of Base Realignment Action (COBRA) model to estimate the costs and savings associated with their base closure and realignment recommendations.[1] The model addresses a full range of factors for estimating the costs, savings, and payback period related to the closure and realignment actions. However, because of the limited time available to us and the limited program documentation, we were not able to verify the accuracy of the revised COBRA model. We confirmed that the formulas for computing construction cost and annual salary and overhead savings were correct. We found several limitations in the revised model and weaknesses in the way the services used it.

In our analysis of the 1988 closure and realignment recommendations, we found misestimates of costs and savings that significantly affected the payback periods. During our current review, we conducted a sensitivity analysis using the COBRA model, which showed the number of years needed to recover the closing costs (the projected payback period) for each particular closure or realignment if one-time costs increase. For many of the recommendations, the required payback years do not substantially increase, even with large increases in projected one-time closure costs. There are several recommendations, however, where the payback can be easily influenced by increased one-time cost.

OSD guidance called for the services to consider the impact that a recommended base closure or realignment would have on the surrounding region's economy. That guidance did not specify the importance of the regional economic impact in developing the recommendations. The guidance was more specific about the calculation and presentation of information regarding the economic impact on bases once they were selected for closure or realignment. Our review showed that the Air Force considered regional economic impact before it recommended which bases to close or realign. The Army and the Navy considered these impacts only for those bases they were proposing for closures or realignments.

BACKGROUND

During our review of the 1988 Commission's recommendations, we found that the COBRA model, which at that time was a complex

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[1]The 1988 Commission on Base Closure and Realignment developed and used the COBRA model to determine whether savings would negate costs within 6 years after completion of the realignment or closure. This 6-year "payback" criterion was included in the 1988 Commission's charter.

spread sheet, contained numerous errors. The model's computations could be revised by the user, and it was difficult to guarantee the consistency of the calculations. Under the sponsorship of the Army's TABS group, the 1988 COBRA spread sheet was rewritten using a formal computer programming language in which algorithms and formulas cannot be modified by the user. This program underwent numerous revisions during March and April 1991 after being distributed to the services and has been further modified since DOD made its closure and realignment recommendations. Program documentation has not been prepared for the revised model. Lack of program documentation and the number of modifications to the COBRA program used to compute the estimated costs prevented complete verification of the accuracy of these estimates, although we did verify formulas for calculating construction costs and annual salary and overhead savings. We chose these factors because errors in estimating them are most likely to affect the years of payback in closing or realigning a base.

The COBRA model uses standard factors to estimate costs, such as moving and construction costs, related to each closure. Each service developed its own factors for average salaries and overhead cost computations. These factors related base costs to the size of the base (for example, the number of personnel, building space, or other appropriate measures). Base-specific cost, personnel, and facility data were then used in each COBRA analysis.

The model was used to estimate one-time realignment and closure costs, such as personnel and equipment moving expenses and new construction at other bases. The model also included one-time savings, such as construction costs that would be avoided, or receipts such as land sale proceeds. Additionally, the model was used to estimate annual savings from eliminating military and civilian personnel authorizations and reducing base maintenance and overhead expenses. The cost model used a net present value analysis to estimate the payback period. In making these calculations it used cumulative 20-year savings in constant fiscal year 1991 dollars.

LIMITATIONS OF THE REVISED COBRA MODEL

Our review showed that the services had difficulty entering some cost data because of limitations in the model. For example, Air Force major commands provided construction estimates for each closure, and the Air Force Surgeon General's office independently estimated the Civilian Health and Medical Program cost for each closure. However, these final cost estimates could not be directly entered into the model since the model relied on algorithms to compute final costs. To work around this limitation, Air Force analysts developed input data to force computations of the military health insurance and construction costs to approximate the estimates prepared by the major commands and the Surgeon General's office.

The Army found that the COBRA model assigned the same costs for moving military students as the costs associated with a permanent change of station. To correct for this, the Army adjusted for one-time moving costs at the affected closure. In addition, the Army calculated changes in overhead costs for the real property maintenance and base operating support accounts using a statistical estimate of how these costs related to base facilities and personnel levels. To implement this methodology, the Army used two-digit decimal overhead factors. However, the model could only accept single-digit decimal overhead factors, which forced the Army to use less precise data in its overhead calculations.

Similarly, to project military health insurance costs from the closure of a hospital, the Navy needed to enter reduced retiree treatment for several receiving hospitals. The model would not accept this input. Consequently, the Navy excluded increased military health insurance costs related to a gaining base. Thus, the annual savings from the hospital's closure were somewhat overstated. In other cases, the Navy wanted to combine the COBRA estimates for pairs of bases and hospitals, but data input screens would not accept the dollar data associated with the merged facilities because of its magnitude.

Other aspects of the revised COBRA model are not realistic. First, the operating cost of family housing is treated as fixed. It does not decrease if a realigning base loses population, nor does it increase at gaining bases when new housing is constructed.

Second, in calculating military health insurance costs and savings, the model assumes that 21 percent of the hospital work load related to DOD's retirees and retirees' dependents will be shifted to Medicare, rather than to military health insurance. The actual percentage varies widely among DOD hospitals, and the model does not allow for the correct proportions to be entered by base.

Third, the model ignores the cost of Medicare to the federal government. Our 1989 report on base closures and realignments recommended that the services include governmentwide costs incurred as a result of base closures. While not a DOD cost, Medicare increases costs to the federal government. DOD decided to continue excluding Medicare costs, and the revised COBRA model only accounts for the patient load that is expected to transfer to military health insurance. The current recommendations will close 18 hospitals, and we believe the associated Medicare costs will increase the total costs of closures.

Fourth, the model does not adjust the fiscal year cash flows on a consistent basis to account for inflation and discount for present value. The model adjusts for inflation on an annual basis. However, it discounts for present value on a mid-year basis. The mid-year discounting procedure is unusual and is not preferable to

the normal end-of-year discounting procedure. This made no difference in the services' calculations since they use a zero inflation rate. However, recalculating the model using other inflation projections could affect the result.

OBSERVATIONS ON COST ESTIMATING PRACTICES

We found inconsistencies in the way the services employed the model to estimate the costs and savings associated with their recommended closures and realignments. OSD did not oversee the cost estimating process, and the services used different fiscal year baselines and different cost factors in their computations. The services also underestimated the net present value of the resulting costs and savings and in some cases entered incorrect data into the model.

OSD Did Not Ensure Cost Comparability

Without OSD oversight of the COBRA cost estimating process, each service approached common problems in different ways.

Services used different baselines

The services used budgets from different fiscal years as their baselines in estimating costs and savings. The Army used its fiscal year 1994 operations and maintenance budget to calculate its operation and maintenance savings. The Air Force used the fiscal year 1991 operations and maintenance budget as its baseline for calculating base closure savings, while the Navy relied upon fiscal year 1992 data. For the Air Force and the Navy, estimated overhead savings thus included savings from changes in the force structure and base closures. Since the future years reflect reduced force structures, we believe the Air Force and Navy estimates of savings from base closures are overstated.

The services also used different sources for obtaining costs for military health services. Whereas the Air Force and the Navy used actual military health insurance costs for the geographical locations of the hospitals, the Army used a nationwide average. This resulted in underestimated costs by at least $7 million. Medical costs vary substantially by location, and actual area cost figures can give very different results.

Reported costs and savings are not in constant fiscal year dollars

Service estimates of costs and savings were to be in constant fiscal year 1991 dollars. The Air Force estimated costs and savings in fiscal year 1991 dollars, with the exception of military health insurance costs, which relied on fiscal year 1990 cost data. These annual costs should have been inflated, which would reduce Air Force annual savings calculations slightly.

Like the Air Force, the Army estimated costs and savings in fiscal year 1991 dollars but failed to use fiscal year 1991 military health insurance cost estimates. Instead, it used fiscal year 1988 data. This error would increase annual insurance costs, lower annual savings, and could lengthen the payback calculations for several closures.

The Navy used fiscal year 1992 budget data to calculate annual salary and overhead savings as well as one-time construction costs. To make comparisons between Navy estimates and those of the other services, these estimates should be deflated to constant fiscal year 1991 dollars. The Navy relied on July 1989 to June 1990 military health insurance cost estimates. For the Navy's net present value and payback calculation, this data should have been inflated to the same fiscal year dollars as its other data.

Different cost factors used by the services

The services increased their construction costs differently when they computed a markup cost for design, site preparation, supervision, inspection, overhead, and contingencies. AAA approved a total Army markup at 44 percent, the Navy used 53 percent, and the Air Force used 45 to 50 percent.

In our 1989 report, we recommended that the costs associated with the Homeowners Assistance Program be included in estimating the effect of a base closure.[2] The revised COBRA model now includes costs associated with the program, depending on user input. Without clear DOD guidance, however, the services calculated these costs differently. The Air Force lacked a methodology to compute the devaluation on homes around the closing base and assumed the devaluation was zero percent, thus assuming no costs to the Homeowners Assistance Program. The Army used property devaluation estimates of zero or 6 percent, and the Navy used zero or 25 percent, depending on perceptions of a base closure's impact on the local economy.

DOD instructed the services to include estimated land value in their calculations of return on investment associated with closing a base. The estimate was to be based on the "highest and best" use of the property but could exclude land that required environmental restoration. However, it is difficult to estimate revenues from land sales. Land sales' estimates assume that the bases could be sold for fair market value. In many cases, land might be transferred to other federal agencies or state or local governments at little or no cost to the receiving organization.

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[2]This program provides military personnel and other federal employees financial assistance in selling their homes when a base realignment or closure causes property values to drop substantially.

The Army and Marine Corps included land proceeds from their closure properties. The Air Force and Navy viewed land sales as sufficiently uncertain to exclude them from their COBRA calculations.

Net present value understated

The services' net present value factors for inflation and discount rates were too conservative, understating the net present value savings and overstating the payback periods. Relying on an Office of Management and Budget directive, OSD required the services to use an inflation rate of zero percent and a discount rate of 10 percent in their calculations. Rates that reflected current indexes should have been used. An expected 4.1 percent inflation rate and a 7.5 percent discount rate were reasonable for the 20-year time horizon of the analysis. Adjusting the models for these factors increases the net present value of the bases' estimated 20-year savings and could shorten the payback periods.

Inaccurate Input Data Sometimes Used

Because of time constraints, we could not verify all data inputs. However, in several cases the services used incorrect data, sometimes underestimating and sometimes overestimating costs. The Marine Corps estimated that the closure of Tustin would yield $29.8 million in annual savings and a 10-year payback period. In our analysis of this recommendation, we found that the model calculated annual real property maintenance savings of $16.1 million at the gaining bases. Using the Navy methodology for computing overhead, we computed the increase in real property maintenance costs at the gaining bases to be $6.4 million, the total annual savings to be $7.0 million, and the payback in excess of 100 years. The model uses a different methodology to calculate overhead costs and savings for the Navy, the Air Force, and the Army. The Marine Corps did not identify its input as Navy facilities, and the COBRA model defaulted to the Army and Air Force methodology for calculating costs and savings. This resulted in a significant error.

The Air Force omitted some moving cost data from several of its calculations. These omissions did not substantially affect the payback calculations. In one case, the Air Force understated annual savings. The annual military health insurance cost resulting from the Myrtle Beach Air Force Base closure was entered as $10.2 million. According to the Air Force Surgeon General's Office, the increased costs would be $2.4 million. This correction increased the annual savings for that closure from $30.3 million to $38.1 million.

In the Army's closure of Ft. Devens, the military health insurance costs were underestimated. Correcting the error decreases the

annual savings for the closure by $6.2 million but does not increase the payback period. In another case the Army overestimated its military health care costs by $3.9 million.

Due to the previously mentioned restrictions in the COBRA model, the Navy understated insurance costs at several gaining bases. Correctly considering these costs would reduce annual savings and could increase the required payback period.

SOME SAVINGS ESTIMATES ARE SENSITIVE TO ONE-TIME COST ESTIMATES

Our review of the 1988 process revealed estimates for one-time costs that later increased and estimated savings that later decreased. Consequently, we tested the sensitivity of the years to recover closing costs to 50 percent and 100 percent increases in costs. We did not experiment with revised annual savings, nor did we examine the basis for the services' cost estimates for any particular recommended closure or realignment. We did not calculate payback periods for decreases in one-time costs; however, if these costs fall, the payback period could shorten.

The results of this sensitivity testing are presented in table 5.1. For many of the recommendations, the years required to pay back costs do not substantially increase even with large increases in projected one-time cost. There are several recommendations, however, where the payback is sensitive to increased one-time cost. The one-time cost of realignments often includes significant new construction at the receiving base. However, overall, we believe the recommendations made for base closures and realignments offer an opportunity for substantial savings.

Table 5.1: Sensitivity Analysis of Payback Periods

	Original payback period	Payback periods after increases in one-time costs	
		50 percent increase	100 percent increase
Army			
Ft. Benjamin Harrison	0[a]	0	2
Forts Chaffee, Polk, Lewis	4	100[b]	100
Ft. Devens	0	0	0
Ft. Dix	0	0	0
Ft. McClellan	2	6	15
Ft. Ord	0	0	0
Sacramento	0	1	3
St. Louis	0	0	0
Letterkenny Army Depot (Realign DESCOM to Rock Island Arsenal)	0	1	2
Letterkenny Army Depot (Realign MRSA to Redstone Arsenal)	0	100	100
Rock Island	0	2	4
Laboratory Command, Combat Materiel Research Laboratory	1	8	100
Ft. Sheridan (to Ft. Knox rather than Ft. Benjamin Harrison)	0	0	0
Navy			
Naval Air Station, Chase Field	1	2	5
Construction Battalion Center, Davisville	10	57	100
Hunters Point Annex	0	0	0
Naval Station, Long Beach	0	0	0
Naval Hospital, Long Beach	10	100	100
Naval Air Station, Moffett Field	0	0	1
Naval Training Center, Orlando	12	100	100
Naval Hospital, Orlando	6	17	100
Naval Shipyard, Philadelphia	3	6	10
Naval Station, Philadelphia	0	0	0
Naval Station Puget Sound (Sand Point)	100	100	100
Marine Corps Air Station, Tustin	10	100	100
Naval Air Station, Whidbey Island	9	100	100
Naval Hospital, Oak Harbor	4	9	19
Naval Air Facility, Midway Island	0	0	0

	Original payback period	Payback periods after increases in one-time costs	
		50 percent increase	100 percent increase
Naval Air Warfare Center[c]	2	5	11
Naval Air Development Center, Warminster, Pennsylvania	9	100	100
Naval Air Propulsion Center, Trenton, New Jersey	0	0	0
Naval Air Engineering Center, Lakehurst, New Jersey	0	0	2
Naval Avionics Center, Indianapolis, Indiana	0	0	2
Naval Weapons Center, China Lake, California	0	0	0
Pacific Missile Test Center, Pt. Mugu, California	0	0	0
Naval Weapons Evaluation Facility, Albuquerque, New Mexico	0	0	0
Naval Command, Control and Ocean Surveillance Center[c]	6	14	100
Naval Electronic Systems Engineering Center, Vallejo, California	12	100	100
Naval Space Systems Activity, Los Angeles, California	11	38	100
Naval Ocean Systems Center Detachment, Kaneohe, Hawaii	9	25	100
Naval Electronic Systems Engineering Center, Charleston, South Carolina	5	10	21
Naval Electronic Systems Security Engineering Center, Washington, D.C.	5	8	15
Naval Electronic Systems Engineering Activity, St. Inigoes, Maryland	6	14	100
Naval Electronic Systems Engineering Center, San Diego, California	3	7	14
Naval Surface Warfare Center[c]	6	18	100
Integrated Combat Systems Test Facility, San Diego, California	100	100	100
Naval Mine Warfare Engineering Activity, Yorktown, Virginia	2	5	8
Naval Surface Warfare Center Detachment, White Oak, Maryland	12	100	100

	Original payback period	Payback periods after increases in one-time costs: 50 percent increase	100 percent increase
Naval Coastal Systems Center, Panama City, Florida	9	100	100
David Taylor Research Center, Annapolis, Maryland	10	100	100
Naval Ordnance Station Indian Head, Maryland	0	0	0
Naval Ordnance Station Louisville, Kentucky	0	0	0
Naval Weapons Support Center, Crane, Indiana	8	22	100
Naval Undersea Warfare Center[c]	5	17	100
Naval Underwater Systems Center Detachment New London, Connecticut	7	100	100
Naval Sea Combat Systems Engineering Station Norfolk, Virginia	6	19	100
Trident Command and Control Maintenance Activity, Newport, Rhode Island	0	0	0
Naval Undersea Warfare Engineering Station, Keyport, Washington	0	0	0
Air Force[d]			
Bergstrom	0	1	1
Carswell	0	0	1
Castle	0	1	3
Eaker	0	0	0
England	0	0	1
Grissom	0	0	0
Loring	0	0	0
Lowry	5	12	38
MacDill	0	0	1
Moody	0	0	1
Myrtle Beach	1	2	3
Williams	0	0	0
Wurtsmith	0	0	0

[a]A payback estimate of zero years occurs when the discounted savings exceed the discounted costs by the year the closure or realignment activity is completed.

[b]The COBRA model does not estimate payback in excess of 100 years.

[c]The Navy did not estimate the payback years for the consolidation of 16 RDT&E Engineering and Fleet Support activities. We computed the payback using COBRA model assumptions for each proposed consolidation.

[d]We did not perform this sensitivity analysis for the Air Force installations--Richards-Gebaur Air Reserve Station and Rickenbacker Air Guard Base--because the cost data for these installations were not available in the COBRA format.

In addition to the sensitivity analysis we conducted, we have displayed the DOD estimates of annual savings and one-time costs for each closure. This data was extracted from the services' COBRA input files using version 1.30 of the model. We have not altered or corrected the data. Due to differences in model versions, our tables may vary slightly from the services' submissions. These tables are in appendix I to this report.

IMPACT ON REGIONAL ECONOMICS WAS NOT A MAJOR CONSIDERATION IN RECOMMENDED REALIGNMENTS

OSD guidance to the services called for them to consider the impact of a recommended base closure or realignment on the economy of the surrounding region but did not specify how they were to consider this impact. The guidance was more specific on the calculation and presentation of information regarding recommended closures and realignments.

The 1988 Base Closure Commission calculated economic impact by measuring the decrease or increase in direct employment at bases recommended for closure or realignment and comparing that measurement with regional employment. The Commission did not have any formal guidelines for evaluating these impacts, nor did it have formal criteria by which it defined regions. In our review of the Commission's work, we recommended that the Secretary of Defense specify the criteria to be used to evaluate the regional economic impact of recommended closures and realignments.

For the 1991 base closures, DOD's Office of Economic Adjustment (OEA) estimated direct and indirect employment impacts expected from closures or realignments. (The direct employment impact is the loss of jobs at the base itself when a base is closed or activities are transferred to another location, while the indirect employment impact is the secondary loss of jobs off the base that results from the lost spending power of base jobs.) OEA defined an economic region or area for about 500 DOD installations in the

United States. In general, OEA defined a region or area as the county where the installation was located, unless the Bureau of the Census defined the county as part of a "Metropolitan Statistical Area" (MSA). If the county containing an installation was part of an MSA, then the MSA was the defined region or area used to estimate the economic impact. Working with the Commerce Department's Bureau of Economic Analysis, OEA assigned indirect employment multipliers to each base. These multipliers were the basis for estimating how many off-base jobs would be lost for each on-base job lost. The problem with this method is that it considers the impact as something that occurs in a single year and implicitly ignores the potential, if any, for actions that may be taken to offset this impact.

The services differed in the extent to which they examined local or regional economic impact. The Air Force conducted the most extensive analysis, using a regional economic model to estimate the impact of a base closure on employment, income, population, and local government finances within a region. We found one mistake in evaluating one category of economic impacts at one Air Force Base--Loring. However, Air Force officials indicated that economic impact was not a major factor in their decisions. The Air Force also conducted a separate determination of the number of years required for environmental cleanup at an installation. Army and Navy assessments do not appear to have been as extensive, although they satisfied the OSD guidance to calculate and present information regarding impacts from recommended closures and realignments.

We did not attempt to reestimate the regional economic impacts that might result from the recommended actions because of the data limitations inherent in such an assessment and time constraints. Such an assessment would begin with a determination of whether or not an affected region was adequately defined. When a region is defined as the county within which a base is located and the county is rural, the impact on employment may be overstated. For instance, if the base draws employees from surrounding counties, the impact would be spread over a larger population than just one county. The regional multipliers used to relate direct and indirect job losses would also have to be examined to judge the adequacy of a regional impact assessment. The number of off-base jobs that would be lost at each location would have to be considered.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

A number of lessons can be learned from the 1991 base closure and realignment process that, if implemented across the board, could strengthen the process in 1993 and 1995. Instead of assigning color codes to subelements and elements as the Air Force and the Navy did, the Army assigned numeric weights to its subelements. Thus, when calculating its ranking of bases in its various categories, there was some precision attached to the analysis. Economic and environmental impact assessments made by the Air Force during its process allowed a look at whether or not significant impacts would likely occur. In contrast, the Navy looked at these impacts only after it had already decided on its proposed recommendations.

The extent to which we could track and assess the process followed by the services was highly dependent on (1) the documentation made available to us, (2) the extent to which the materials used in the process had been checked and verified, (3) the access we had to the process and the officials who participated in the process, and (4) the time available. For example, the Army and the Air Force made extensive materials on their decision process available to us and used their internal audit agencies in implementing their processes. We were also able to discuss the process as it was being conducted and after it was finished with numerous officials involved at all levels of the Army and Air Force decision-making chain, which facilitated our evaluation.

We were unable to analyze the Navy's process for recommending bases for closure or realignment because the Navy did not adequately document its decision-making process or the results of its deliberations, nor did it have an internal control process.

Since the Navy did not document the rationale for its decisions, we were unable to analyze its closure and realignment recommendations. As an alternative means of evaluating the Navy's recommendations, we looked at ship berthing capacity in comparison to the Force Structure Plan. After analyzing capacity data, we found that the Navy will have significant excess berthing capacity if only the recommended facilities are closed. Changes have occurred in the strategic homeporting concept that, when combined with excess available pier space for berthing ships, support the recommendation for fewer Navy bases.

DOD did not actively oversee the process by which the military services chose their proposals for closing and realigning bases, and we found that policy guidance published by DOD was applied inconsistently among the services. We recognize that inconsistent procedures among the services or within a service do not necessarily affect an outcome if all bases of the same type are

treated equally. However, we are concerned that DOD's guidance allowed the estimating processes and cost factors used by the services to vary.

We tested for each closure or realignment the sensitivity of estimates of years to recover the closing costs (the projected payback period). The analysis showed that when 50 percent and 100 percent increased one-time costs were applied, the payback period for many of the recommendations did not substantially increase. However, there are several recommended closure and realignment actions that are sensitive to increases in one-time costs; the years estimated to recover costs are significantly extended.

RECOMMENDATIONS

We recommend that the Secretary of Defense

-- require the Secretary of the Navy to submit to the Defense Base Closure and Realignment Commission specific details on the manner in which its Base Structure Committee compared bases to develop closure and realignment recommendations and

-- ensure the use of consistent procedures and practices among the services in future base closure and realignment reviews.

We also recommend that the Chairman, Defense Base Closure and Realignment Commission,

-- consider, in evaluating the Navy requirement for bases, the impact of excess space for ship berths on base requirements and

-- consider for all the services the effects of incorrect cost and savings estimates on all proposed base closures and realignments, using the result of our sensitivity analysis.

COST AND SAVINGS ASSOCIATED WITH BASE CLOSURE AND REALIGNMENTS

Table I.1: Ft. Benjamin Harrison

	Amount (millions)
One-time costs	
New construction	$ 52.8
Moving	18.8
Personnel costs	6.3
Homeowners Assistance Program	1.9
Other	2.9
Total[a]	$ 82.8
One-time savings	
Construction avoidance	$ 6.6
Procurement avoidance	7.2
Land sales	104.0
Total[a]	$117.9
Recurring savings	
Mission	$ 0
Military salaries	14.3
Civilian salaries	10.9
Overhead	10.1
CHAMPUS	0
Other	.8
Total[a]	$ 36.2
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	78
Enlisted	361
Civilians	436
Total	875

[a]Total dollar amounts may not add due to rounding.

Table I.2: Ft. Chaffee

	Amount (millions)
One-time costs	
New construction	$ 19.8
Moving	11.4
Personnel	1.4
Homeowners Assistance Program	0
Other	1.8
Total[a]	$ 34.3
One-time savings	
Construction avoidance	$223.4
Procurement avoidance	0
Land sales	0
Total[a]	$223.4
Recurring savings	
Mission	$ 0
Military salaries	1.3
Civilian salaries	2.8
Overhead	3.7
CHAMPUS	0
Other	.5
Total[a]	$ 8.3
Payback period (in years)[b]	0
Personnel authorizations eliminated	
Officers	11
Enlisted	24
Civilians	112
Total	147

[a]Total dollar amounts may not add due to rounding.

[b]The closure of Ft. Chaffee, coupled with the realignment of Fts. Hood, Lewis, and Polk, provides a payback period of 4 years after the completion of the realignment.

Table I.3: Ft. Devens

	Amount (millions)
One-time costs	
New construction	$ 80.6
Moving	14.4
Personnel	18.5
Homeowners Assistance Program	0
Other	12.6
Total[a]	$126.1
One-time savings	
Construction avoidance	$ 73.9
Procurement avoidance	50.0
Land sales	112.5
Total[a]	$236.3
Recurring savings	
Mission	$ (7.2)[b]
Military salaries	7.8
Civilian salaries	29.6
Overhead	21.0
CHAMPUS	1.9
Other	2.1
Total[a]	$ 55.2
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	78
Enlisted	116
Civilians	1,185
Total	1,379

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.4: Ft. Dix

	Amount (millions)
One-time costs	
New construction	$ 15.8
Moving	3.4
Personnel	5.8
Homeowners Assistance Program	0
Other	1.5
Total[a]	$ 26.5
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	82.6
Total[a]	$ 82.6
Recurring savings	
Mission	$ (.5)[b]
Military salaries	6.7
Civilian salaries	9.6
Overhead	16.8
CHAMPUS	0
Other	1.0
Total[a]	$ 33.7
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	23
Enlisted	200
Civilians	385
Total	608

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.5: Laboratory Command, Combat Materiel Research Laboratory

	Amount (millions)
One-time costs	
New construction	$231.0
Moving	71.2
Personnel	12.8
Homeowners Assistance Program	0
Other	3.5
Total[a]	$318.4
One-time savings	
Construction avoidance	$ 77.0
Procurement avoidance	0
Land sales	10.5
Total[a]	$ 87.5
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	48.5
Overhead	3.0
CHAMPUS	0
Other	0
Total[a]	$ 51.5
Payback period (in years)	1
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	969
Total	969

[a]Total dollar amounts may not add due to rounding.

Table I.6 : Letterkenny Army Depot (Realign Material Readiness Support Activity to Redstone Arsenal)

	Amount (millions)
One-time costs	
New construction	$ 16.9
Moving	0
Personnel	0
Homeowners Assistance Program	0
Other	0
Total[a]	$ 16.9
One-time savings	
Construction avoidance	$ 16.0
Procurement avoidance	0
Land sales	0
Total[a]	$ 16.0
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	0
Overhead	0
CHAMPUS	0
Other	0
Total[a]	$ 0
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	0
Total	0

[a]Total dollar amounts may not add due to rounding.

Table I.7: Letterkenny Army Depot - (Realign Depot Systems Command to Rock Island Arsenal)

	Amount (millions)
One-time costs	
New construction	$ 8.7
Moving	17.7
Personnel	5.7
Homeowners Assistance Program	0
Other	3.5
Total[a]	$ 35.7
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	26.1
Overhead	.9
CHAMPUS	0
Other	0
Total[a]	$ 27.0
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	746
Total	746

[a]Total dollar amounts may not add due to rounding.

Table I.8: Ft. Lewis to Ft. Polk

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	14.4
Personnel	.5
Homeowners Assistance Program	0
Other	9.2
Total[a]	$ 24.1
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	0
Overhead	2.1
CHAMPUS	0
Other	1.4
Total[a]	$ 3.5
Payback period (in years)[b]	14
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	0
Total	0

[a]Total dollar amounts may not add due to rounding.

[b]The realignment of Ft. Lewis, coupled with the closure of Ft. Chaffee and the realignment of Fts. Hood and Polk, provides a payback period of 4 years after the completion of the realignment.

Table I.9: Ft. McClellan

	Amount (millions)
One-time costs	
New construction	$ 65.7
Moving	22.4
Personnel	2.3
Homeowners Assistance Program	2.1
Other	11.4
Total[a]	$103.9
One-time savings	
Construction avoidance	$ 2.8
Procurement avoidance	9.5
Land sales	48.5
Total[a]	$ 60.7
Recurring savings	
Mission	$ 0
Military salaries	17.6
Civilian salaries	3.9
Overhead	20.7
CHAMPUS	(9.6)[b]
Other	(6.4)[b]
Total[a]	$ 26.3
Payback period (in years)	2
Personnel authorizations eliminated	
Officers	127
Enlisted	374
Civilians	156
Total	657

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.10: Ft. Ord

	Amount (millions)
One-time costs	
New construction	$ 2.6
Moving	44.6
Personnel	18.3
Homeowners Assistance Program	6.9
Other	48.5
Total[a]	$120.9
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	400.0
Total[a]	$400.0
Recurring savings	
Mission	$ 0
Military salaries	37.5
Civilian salaries	24.2
Overhead	24.2
CHAMPUS	(12.5)[b]
Other	(3.1)[b]
Total[a]	$ 70.4
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	264
Enlisted	810
Civilians	967
Total	2,041

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.11: Ft. Polk to Ft. Hood

	Amount (millions)
One-time costs	
New construction	$222.3
Moving	42.6
Personnel	1.7
Homeowners Assistance Program	0
Other	7.8
Total[a]	$274.5
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 4.7
Military salaries	0
Civilian salaries	0
Overhead	5.1
CHAMPUS	0
Other	1.3
Total[a]	$ 11.1
Payback period (in years)[b]	100
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	0
Total	0

[a]Total dollar amounts may not add due to rounding.

[b]The realignment of Ft. Polk, coupled with the closure of Ft. Chaffee and the realignment of Fts. Hood and Lewis provides a payback period of 4 years after the completion of the realignment.

Table I.12: Rock Island Arsenal

	Amount (millions)
One-time costs	
New construction	$ 38.3
Moving	27.9
Personnel	7.5
Homeowners Assistance Program	0
Other	3.1
Total[a]	$ 76.8
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	34.0
Overhead	4.8
CHAMPUS	0
Other	0
Total[a]	$ 38.8
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	972
Total	972

[a]Total dollar amounts may not add due to rounding.

Table I.13: Sacramento Army Depot

	Amount (millions)
One-time costs	
New construction	$ 34.5
Moving	36.2
Personnel	10.1
Homeowners Assistance Program	0
Other	7.5
Total[a]	$ 88.3
One-time savings	
Construction avoidance	$ 3.9
Procurement avoidance	0
Land sales	0
Total[a]	$ 3.9
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	35.7
Overhead	20.5
CHAMPUS	0
Other	(.4)[b]
Total[a]	$ 55.8
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	1,019
Total	1,019

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.14: St. Louis

	Amount (millions)
One-time costs	
New construction	$ 2.0
Moving	0
Personnel	4.3
Homeowners Assistance Program	0
Other	0
Total[a]	$ 6.4
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	17.5
Overhead	5.0
CHAMPUS	0
Other	0
Total[a]	$ 22.5
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	500
Total	500

[a]Total dollar amounts may not add due to rounding.

Table I.15: Ft. Sheridan (Differences in costs to locate Ft. Sheridan U.S. Army Recruiting Command at Ft. Knox rather than Ft. Benjamin Harrison)

	Amount (millions)
One-time costs	
New construction	$ (4.4)[b]
Moving	0
Personnel	0
Homeowners Assistance Program	0
Other	0
Total[a]	$ (4.4)[b]
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	0
Overhead	.5
CHAMPUS	0
Other	.2
Total[a]	$ .7
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	0
Total	0

[a]Total dollar amounts may not add due to rounding.

[b]Represents difference between the cost to move to Ft. Harrison ($32.7 million) and the cost to move to Ft. Knox ($28.3 million).

Table I.16: Bergstrom Air Force Base

	Amount (millions)
One-time costs	
New construction	$ 22.5
Moving	6.8
Personnel	.3
Homeowners Assistance Program	0
Other	4.4
Total[a]	$ 34.0
One-time savings	
Construction avoidance	$ 2.4
Procurement avoidance	0
Land sales	0
Total[a]	$ 2.4
Recurring savings	
Mission	$ 1.0
Military salaries	35.7
Civilian salaries	(1.0)[b]
Overhead	8.1
CHAMPUS	(6.6)[b]
Other	(.8)[b]
Total[a]	$ 36.3
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	106
Enlisted	937
Civilians	(30)[c]
Total	1,013

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

[c]The closure requires an increase in civilian authorizations.

Table I.17: Carswell Air Force Base

	Amount (millions)
One-time costs	
New construction	$ 20.0
Moving	11.3
Personnel	.6
Homeowners Assistance Program	0
Other	5.2
Total[a]	$ 37.1
One-time savings	
Construction avoidance	$ 13.3
Procurement avoidance	0
Land sales	0
Total[a]	$ 13.3
Recurring savings	
Mission	$ 1.2
Military salaries	59.9
Civilian salaries	.9
Overhead	10.3
CHAMPUS	(25.0)[b]
Other	(1.6)[b]
Total[a]	$ 45.7
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	260
Enlisted	1,387
Civilians	27
Total	1,674

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.18: Castle Air Force Base

	Amount (millions)
One-time costs	
New construction	$ 69.8
Moving	16.6
Personnel	2.4
Homeowners Assistance Program	0
Other	4.5
Total[a]	$ 93.3
One-time savings	
Construction avoidance	$ 31.1
Procurement avoidance	0
Land sales	0
Total[a]	$ 31.1
Recurring savings	
Mission	$ 1.5
Military salaries	40.2
Civilian salaries	7.3
Overhead	10.1
CHAMPUS	(4.1)[b]
Other	(2.0)[b]
Total[a]	$ 52.8
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	107
Enlisted	1,082
Civilians	223
Total	1,412

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

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Table I.19: Eaker Air Force Base

	Amount (millions)
One-time costs	
New construction	$ 4.7
Moving	2.1
Personnel	3.8
Homeowners Assistance Program	0
Other	2.7
Total[a]	$ 13.3
One-time savings	
Construction avoidance	$ 4.0
Procurement avoidance	0
Land sales	0
Total[a]	$ 4.0
Recurring savings	
Mission	$ .9
Military salaries	35.5
Civilian salaries	7.6
Overhead	9.7
CHAMPUS	.6
Other	.3
Total[a]	$ 52.9
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	111
Enlisted	920
Civilians	234
Total	1,265

[a]Total dollar amounts may not add due to rounding.

Table I.20: England Air Force Base

	Amount (millions)
One-time costs	
New construction	$ 20.4
Moving	9.4
Personnel	3.4
Homeowners Assistance Program	0
Other	2.8
Total[a]	$ 36.0
One-time savings	
Construction avoidance	$ 14.2
Procurement avoidance	0
Land sales	0
Total[a]	$ 14.2
Recurring savings	
Mission	$ .9
Military salaries	29.4
Civilian salaries	7.3
Overhead	13.5
CHAMPUS	(2.7)[b]
Other	(1.2)[b]
Total[a]	$ 47.3
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	88
Enlisted	769
Civilians	222
Total	1,079

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.21: Grissom Air Force Base

	Amount (millions)
One-time costs	
New construction	$ 12.5
Moving	2.5
Personnel	.1
Homeowners Assistance Program	0
Other	4.0
Total[a]	$ 19.1
One-time savings	
Construction avoidance	$ 11.3
Procurement avoidance	0
Land sales	0
Total[a]	$ 11.3
Recurring savings	
Mission	$ .6
Military salaries	38.5
Civilian salaries	.6
Overhead	10.1
CHAMPUS	(.5)[b]
Other	(.9)[b]
Total[a]	$ 48.4
Pay back period (in years)	0
Personnel authorizations eliminated	
Officers	85
Enlisted	1,077
Civilians	18
Total	1,180

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.22: Loring Air Force Base

	Amount (millions)
One-time costs	
New construction	$ 15.8
Moving	12.3
Personnel	6.8
Homeowners Assistance Program	0
Other	6.7
Total[a]	$ 41.5
One-time savings	
Construction avoidance	$ 8.5
Procurement avoidance	0
Land sales	0
Total[a]	$ 8.5
Recurring savings	
Mission	$ 2.4
Military salaries	33.7
Civilian salaries	14.0
Overhead	17.0
CHAMPUS	(1.0)[b]
Other	(4.2)[b]
Total[a]	$ 61.9
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	73
Enlisted	946
Civilians	429
Total	1,448

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.23: Lowry Air Force Base

	Amount (millions)
One-time costs	
New construction	$188.1
Moving	19.9
Personnel	3.4
Homeowners Assistance Program	0
Other	8.3
Total[a]	$219.8
One-time savings	
Construction avoidance	$ 25.0
Procurement avoidance	0
Land sales	0
Total[a]	$ 25.0
Recurring savings	
Mission	$ 3.0
Military salaries	19.4
Civilian salaries	12.0
Overhead	9.5
CHAMPUS	0
Other	(1.8)[b]
Total[a]	$ 42.2
Payback period (in years)	5
Personnel authorizations eliminated	
Officers	94
Enlisted	428
Civilians	378
Total	900

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.24: MacDill Air Force Base

	Amount (millions)
One-time costs	
New construction	$ 9.4
Moving	17.1
Personnel	.6
Homeowners Assistance Program	0
Other	1.8
Total[a]	$ 28.9
One-time savings	
Construction avoidance	$ 13.4
Procurement avoidance	0
Land sales	0
Total[a]	$ 13.4
Recurring savings	
Mission	$ 2.1
Military salaries	13.7
Civilian salaries	2.4
Overhead	1.9
CHAMPUS	0
Other	.5
Total[a]	$ 20.5
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	13
Enlisted	421
Civilians	66
Total	500

[a]Total dollar amounts may not add due to rounding.

Table I.25: Moody Air Force Base

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	4.0
Personnel	4.7
Homeowners Assistance Program	0
Other	2.8
Total[a]	$ 11.5
One-time savings	
Construction avoidance	$ 4.4
Procurement avoidance	0
Land sales	0
Total[a]	$ 4.4
Recurring savings	
Mission	$ 2.3
Military salaries	29.8
Civilian salaries	9.2
Overhead	7.3
CHAMPUS	(3.3)[b]
Other	(.2)[b]
Total[a]	$ 45.2
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	118
Enlisted	714
Civilians	288
Total	1,120

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.26: Myrtle Beach Air Force Base

	Amount (millions)
One-time costs	
New construction	$ 35.7
Moving	8.1
Personnel	2.6
Homeowners Assistance Program	0
Other	3.6
Total[a]	$ 50.1
One-time savings	
Construction avoidance	$ 2.4
Procurement avoidance	0
Land sales	0
Total[a]	$ 2.4
Recurring savings	
Mission	$ 1.0
Military salaries	29.6
Civilian salaries	6.3
Overhead	5.1
CHAMPUS	(10.2)[b]
Other	(1.4)[b]
Total[a]	$ 30.3
Payback period (in years)	1
Personnel authorizations eliminated	
Officers	95
Enlisted	762
Civilians	196
Total	1,053

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.27: Richards-Gebaur Air Reserve Station

	Amount (millions)
One-time costs	
New construction	$ 33.4
Moving	14.2
Personnel	0
Homeowners Assistance Program	0
Other	0
Total[a]	$ 47.6
One-time savings	
Construction avoidance	$ 2.3
Procurement avoidance	0
Land sales	0
Total[a]	$ 2.3
Recurring savings	
Mission	$ 0
Salaries[b]	4.1
Overhead	8.8
CHAMPUS	0
Other	0
Total[a]	$ 12.9
Payback period (in years)	5
Personnel authorizations eliminated	
Total[b]	108

[a]Total dollar amounts may not add due to rounding.
[b]Personnel and salaries reductions detail not available.

Table I.28: Rickenbacker Air Guard Base

	Amount (millions)
One-time costs	
New Construction	$ 61.5
Moving	44.6
Personnel Costs	0
Homeowners Assistance Program	0
Other	0
Total[a]	$106.1
One-time Savings	
Construction Avoidance	$ 14.0
Procurement Avoidance	0
Land Sales	0
Total[a]	$ 14.0
Recurring savings	
Mission	$ 0
Salaries[b]	11.7
Overhead	11.0
Champus	0
Other	0
Total[a]	$ 22.7
Payback period (in years)	5
Personnel authorizations eliminated	
Total[b]	$ 307

[a]Total dollar amounts may not add due to rounding.
[b]Personnel and salaries reductions detail not available.

Table I.29: Williams Air Force Base

	Amount (millions)
One-time costs	
New construction	$ 5.3
Moving	7.8
Personnel	4.8
Homeowners Assistance Program	0
Other	3.6
Total[a]	$ 21.5
One-time savings	
Construction avoidance	$ 11.2
Procurement avoidance	0
Land sales	0
Total[a]	$ 11.2
Recurring savings	
Mission	$ 1.1
Military salaries	38.0
Civilian salaries	10.1
Overhead	11.1
CHAMPUS	(4.5)[b]
Other	(1.5)[b]
Total[a]	$ 54.2
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	252
Enlisted	683
Civilians	316
Total	1,251

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.30: Wurtsmith Air Force Base

	Amount (millions)
One-time costs	
New construction	$ 11.1
Moving	3.2
Personnel	5.2
Homeowners Assistance Program	0
Other	3.9
Total[a]	$ 23.4
One-time savings	
Construction avoidance	$ 1.0
Procurement avoidance	0
Land sales	0
Total[a]	$ 1.0
Recurring savings	
Mission	$ 1.2
Military salaries	38.6
Civilian salaries	10.3
Overhead	14.7
CHAMPUS	(1.0)[b]
Other	(.4)[b]
Total[a]	$ 63.4
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	122
Enlisted	995
Civilians	317
Total	1,434

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.31: Chase Field Naval Air Station

	Amount (millions)
One-time costs	
New construction	$ 24.9
Moving	2.1
Personnel	4.3
Homeowners Assistance Program	7.7
Other	8.7
Total[a]	$ 47.6
One-time savings	
Construction avoidance	$ 16.8
Procurement avoidance	0
Land sales	0
Total[a]	$ 16.8
Recurring savings	
Mission	$ 0
Military salaries	10.5
Civilian salaries	9.6
Overhead	1.7
CHAMPUS	0
Other	.3
Total[a]	$ 22.1
Payback period (in years)	1
Personnel authorizations eliminated	
Officers	110
Enlisted	98
Civilians	255
Total	463

[a]Total dollar amounts may not add due to rounding.

Table I.32: Construction Battalion Center, Davisville

	Amount (millions)
One-time costs	
New construction	$ 30.1
Moving	1.5
Personnel	1.4
Homeowners Assistance Program	0
Other	3.6
Total[a]	$ 36.6
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	3.9
Overhead	1.6
CHAMPUS	0
Other	0
Total[a]	$ 5.5
Payback period (in years)	10
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	95
Total	95

[a]Total dollar amounts may not add due to rounding.

Table I.33: David Taylor Research Center

	Amount (millions)
One-time costs	
New construction	$ 31.8
Moving	1.2
Personnel	3.1
Homeowners Assistance Program	0
Other	11.5
Total[a]	$ 47.6
One-time savings	
Construction avoidance	$ 3.4
Procurement avoidance	0
Land sales	0
Total[a]	$ 3.4
Recurring savings	
Mission	$ 0
Military salaries	.2
Civilian salaries	4.6
Overhead	.9
CHAMPUS	0
Other	0
Total[a]	$ 5.6
Payback period (in years)	10
Personnel authorizations eliminated	
Officers	1
Enlisted	4
Civilians	110
Total	115

[a]Total dollar amounts may not add due to rounding.

Table I.34: Hunters Point Annex

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	0
Personnel	0
Homeowners Assistance Program	0
Other	0
Total[a]	$ 0
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	0
Overhead	.3
CHAMPUS	0
Other	0
Total[a]	$ .3
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	0
Total	0

[a]Total dollar amounts may not add due to rounding.

Table I.35: Integrated Combat Systems Test Facilities

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	.6
Personnel	.2
Homeowners Assistance Program	0
Other	6.9
Total[a]	$ 7.7
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	.3
Overhead	.2
CHAMPUS	0
Other	0
Total[a]	$ .4
Payback period (in years)	100
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	7
Total	7

[a]Total dollar amounts may not add due to rounding.

Table I.36: Long Beach Naval Station

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	14.0
Personnel	4.7
Homeowners Assistance Program	0
Other	12.4
Total[a]	$ 31.1
One-time savings	
Construction avoidance	$ 87.6
Procurement avoidance	60.0
Land sales	0
Total[a]	$147.6
Recurring savings	
Mission	$ 0
Military salaries	68.3
Civilian salaries	10.4
Overhead	15.2
CHAMPUS	0
Other	5.5
Total[a]	$ 99.4
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	93
Enlisted	2,095
Civilians	277
Total	2,465

[a]Total dollar amounts may not add due to rounding.

Table I.37: Moffett Field Naval Air Station

	Amount (millions)
One-time costs	
New construction	$ 81.8
Moving	9.5
Personnel	6.9
Homeowners Assistance Program	0
Other	7.6
Total[a]	$105.8
One-time savings	
Construction avoidance	$ 21.0
Procurement avoidance	0
Land sales	0
Total[a]	$ 21.0
Recurring savings	
Mission	$ 0
Military salaries	41.4
Civilian salaries	16.8
Overhead	12.0
CHAMPUS	0
Other	2.2
Total[a]	$ 72.4
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	124
Enlisted	1,111
Civilians	446
Total	1,681

[a]Total dollar amounts may not add due to rounding.

Table I.38: Naval Air Development Center

	Amount (millions)
One-time costs	
New construction	$115.9
Moving	25.8
Personnel	10.6
Homeowners Assistance Program	0
Other	32.0
Total[a]	$184.2
One-time savings	
Construction avoidance	$ 10.7
Procurement avoidance	5.6
Land sales	0
Total[a]	$ 16.3
Recurring savings	
Mission	$ 0
Military salaries	3.7
Civilian salaries	15.5
Overhead	6.0
CHAMPUS	0
Other	0
Total[a]	$ 25.2
Payback period (in years)	9
Personnel authorizations eliminated	
Officers	25
Enlisted	67
Civilians	374
Total	466

[a]Total dollar amounts may not add due to rounding.

Table I.39: Naval Air Engineering Center

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	0
Personnel	1.5
Homeowners Assistance Program	0
Other	5.9
Total[a]	$ 7.4
One-time savings	
Construction avoidance	$ .9
Procurement avoidance	.3
Land sales	0
Total[a]	$ 1.2
Recurring savings	
Mission	$ 0
Military salaries	.2
Civilian salaries	3.6
Overhead	0
CHAMPUS	0
Other	0
Total[a]	$ 3.8
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	0
Enlisted	8
Civilians	86
Total	94

[a]Total dollar amounts may not add due to rounding.

Table I.40: Naval Air Facility, Midway

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	0
Personnel	0
Homeowners Assistance Program	0
Other	2.1
Total[a]	$ 2.1
One-time savings	
Construction avoidance	$ 14.5
Procurement avoidance	0
Land sales	0
Total[a]	$ 14.5
Recurring savings	
Mission	$ 0
Military salaries	.6
Civilian salaries	0
Overhead	6.2
CHAMPUS	0
Other	0
Total[a]	$ 6.8
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	4
Enlisted	11
Civilians	1
Total	16

[a]Total dollar amounts may not add due to rounding.

Table I.41: Naval Air Propulsion Center

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	.6
Personnel	2.4
Homeowners Assistance Program	0
Other	1.4
Total[a]	$ 4.3
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	4.3
Overhead	.3
CHAMPUS	0
Other	0
Total[a]	$ 4.6
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	103
Total	103

[a]Total dollar amounts may not add due to rounding.

Table I.42: Naval Avionics Center

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	0
Personnel	2.1
Homeowners Assistance Program	0
Other	5.9
Total[a]	$ 8.0
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	5.0
Overhead	0
CHAMPUS	0
Other	0
Total[a]	$ 5.0
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	120
Total	120

[a]Total dollar amounts may not add due to rounding.

Table I.43: Naval Coastal Systems Center

	Amount (millions)
One-time costs	
New construction	$ 8.3
Moving	3.1
Personnel	1.1
Homeowners Assistance Program	0
Other	14.1
Total[a]	$ 26.6
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	4.5
Land sales	0
Total[a]	$ 4.5
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	1.8
Overhead	1.4
CHAMPUS	0
Other	0
Total[a]	$ 3.2
Payback period (in years)	9
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	44
Total	44

[a]Total dollar amounts may not add due to rounding.

Table I.44: Naval Electronic Systems Engineering Activity

	Amount (millions)
One-time costs	
New construction	$ 6.8
Moving	3.0
Personnel	1.3
Homeowners Assistance Program	0
Other	1.1
Total[a]	$ 12.1
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	1.0
Civilian salaries	1.4
Overhead	0
CHAMPUS	0
Other	0
Total[a]	$ 2.4
Payback period (in years)	6
Personnel authorizations eliminated	
Officers	5
Enlisted	22
Civilians	38
Total	65

[a]Total dollar amounts may not add due to rounding.

Table I.45: Naval Electronic Systems Engineering Center, Charleston

	Amount (millions)
One-time costs	
New construction	$ 8.4
Moving	2.1
Personnel	1.4
Homeowners Assistance Program	0
Other	2.5
Total[a]	$ 14.4
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	.3
Civilian salaries	1.6
Overhead	1.4
CHAMPUS	0
Other	0
Total[a]	$ 3.2
Payback period (in years)	5
Personnel authorizations eliminated	
Officers	4
Enlisted	0
Civilians	38
Total	42

[a]Total dollar amounts may not add due to rounding.

Table I.46: Naval Electronic Systems Engineering Center, San Diego

	Amount (millions)
One-time costs	
New construction	$ 8.3
Moving	.1
Personnel	1.6
Homeowners Assistance Program	0
Other	.9
Total[a]	$ 10.9
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	.3
Civilian salaries	1.7
Overhead	.7
CHAMPUS	0
Other	0
Total[a]	$ 2.7
Payback period (in years)	3
Personnel authorizations eliminated	
Officers	4
Enlisted	2
Civilians	40
Total	46

[a]Total dollar amounts may not add due to rounding.

Table I.47: Naval Electronic Systems Engineering Center, Vallejo

	Amount (millions)
One-time costs	
New construction	$ 8.5
Moving	3.2
Personnel	1.1
Homeowners Assistance Program	0
Other	2.5
Total[a]	$ 15.3
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	.3
Civilian salaries	1.3
Overhead	.5
CHAMPUS	0
Other	0
Total[a]	$ 2.1
Payback period (in years)	12
Personnel authorizations eliminated	
Officers	2
Enlisted	6
Civilians	32
Total	40

[a]Total dollar amounts may not add due to rounding.

Table I.48: Naval Electronic Systems Security Engineering Center

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	.9
Personnel	.6
Homeowners Assistance Program	0
Other	2.1
Total[a]	$ 3.6
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	.1
Civilian salaries	.7
Overhead	0
CHAMPUS	0
Other	0
Total[a]	$ .9
Payback period (in years)	5
Personnel authorizations eliminated	
Officers	2
Enlisted	0
Civilians	18
Total	20

[a]Total dollar amounts may not add due to rounding.

Table I.49: Naval Hospital Long Beach

	Amount (millions)
One-time costs	
New construction	$ 69.2
Moving	5.2
Personnel	2.0
Homeowners Assistance Program	0
Other	4.7
Total[a]	$ 81.1
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	1.3
Land sales	0
Total[a]	$ 1.3
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	2.5
Overhead	4.8
CHAMPUS	4.6
Other	.1
Total[a]	$ 12.0
Payback period (in years)	10
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	67
Total	67

[a]Total dollar amounts may not add due to rounding.

Table I.50: Naval Hospital Oak Harbor (Whidbey Island)

	Amount (millions)
One-time costs	
New construction	$ 21.7
Moving	1.7
Personnel	.3
Homeowners Assistance Program	0
Other	.2
Total[a]	$ 24.0
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	.8
Land sales	0
Total[a]	$ .8
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	.5
Overhead	(.3)[b]
CHAMPUS	7.2
Other	(.3)[b]
Total[a]	$ 7.2
Payback period (in years)	4
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	14
Total	14

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.51: Naval Hospital Orlando

	Amount (millions)
One-time costs	
New construction	$ 45.9
Moving	4.6
Personnel	1.1
Homeowners Assistance Program	0
Other	.9
Total[a]	$ 52.4
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	4.8
Land sales	0
Total[a]	$ 4.8
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	2.0
Overhead	1.0
CHAMPUS	9.3
Other	(.9)[b]
Total[a]	$ 11.4
Payback period (in years)	6
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	52
Total	52

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.52: Naval Mine Warfare Engineering Activity

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	1.2
Personnel	1.0
Homeowners Assistance Program	0
Other	.6
Total[a]	$ 2.8
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	.1
Civilian salaries	.8
Overhead	(.1)[b]
CHAMPUS	0
Other	0
Total[a]	$ .8
Payback period (in years)	2
Personnel authorizations eliminated	
Officers	1
Enlisted	1
Civilians	20
Total	22

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.53: Naval Ocean Systems Center

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	2.3
Personnel	.7
Homeowners Assistance Program	0
Other	2.7
Total[a]	$ 5.6
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	.1
Civilian salaries	.8
Overhead	0
CHAMPUS	0
Other	0
Total[a]	$ .9
Payback period (in years)	9
Personnel authorizations eliminated	
Officers	1
Enlisted	1
Civilians	20
Total	22

[a]Total dollar amounts may not add due to rounding.

Table I.54: Naval Ordnance Station, Indian Head

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	0
Personnel	.5
Homeowners Assistance Program	0
Other	0
Total[a]	$ .5
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	1.1
Overhead	0
CHAMPUS	0
Other	0
Total[a]	$ 1.1
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	30
Total	30

[a]Total dollar amounts may not add due to rounding.

Table I.55: Naval Ordnance Station, Louisville

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	.7
Personnel	1.9
Homeowners Assistance Program	0
Other	0
Total[a]	$ 2.6
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	.1
Civilian salaries	6.3
Overhead	0
CHAMPUS	0
Other	0
Total[a]	$ 6.4
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	1
Enlisted	0
Civilians	152
Total	153

[a]Total dollar amounts may not add due to rounding.

Table I.56: Naval Sea Combat Systems Engineering Station

	Amount (millions)
One-time costs	
New construction	$ 3.7
Moving	.7
Personnel	.6
Homeowners Assistance Program	0
Other	5.9
Total[a]	$ 10.9
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	.1
Civilian salaries	1.1
Overhead	.6
CHAMPUS	0
Other	0
Total[a]	$ 1.8
Payback period (in years)	6
Personnel authorizations eliminated	
Officers	1
Enlisted	0
Civilians	30
Total	31

[a]Total dollar amounts may not add due to rounding.

Table I.57: Naval Space Systems Activity

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	.3
Personnel	.1
Homeowners Assistance Program	0
Other	2.4
Total[a]	$ 2.8
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	.2
Civilian salaries	.2
Overhead	.1
CHAMPUS	0
Other	(.1)[b]
Total[a]	$ .4
Payback period (in years)	11
Personnel authorizations eliminated	
Officers	3
Enlisted	0
Civilians	4
Total	7

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.58: Naval Station Philadelphia

	Amount (millions)
One-time costs	
New construction	$ 21.0
Moving	10.7
Personnel	12.0
Homeowners Assistance Program	0
Other	9.7
Total[a]	$ 53.5
One-time savings	
Construction avoidance	$ 9.8
Procurement avoidance	0
Land sales	0
Total[a]	$ 9.8
Recurring savings	
Mission	$ (2.8)[b]
Military salaries	10.7
Civilian salaries	22.8
Overhead	13.3
CHAMPUS	0
Other	(3.5)[b]
Total[a]	$ 40.4
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	47
Enlisted	252
Civilians	606
Total	905

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.59: Naval Surface Warfare Center Detachment

	Amount (millions)
One-time costs	
New construction	$ 14.7
Moving	13.4
Personnel	4.2
Homeowners Assistance Program	0
Other	56.7
Total[a]	$ 89.0
One-time savings	
Construction avoidance	$ 16.0
Procurement avoidance	0
Land sales	0
Total[a]	$ 16.0
Recurring savings	
Mission	$ (1.0)[b]
Military salaries	.2
Civilian salaries	6.5
Overhead	5.4
CHAMPUS	0
Other	0
Total[a]	$ 11.2
Payback period (in years)	12
Personnel authorizations eliminated	
Officers	3
Enlisted	0
Civilians	157
Total	160

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.60: Naval Training Center, Orlando

	Amount (millions)
One-time costs	
New construction	$379.9
Moving	9.7
Personnel	6.6
Homeowners Assistance Program	0
Other	7.2
Total[a]	$403.4
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	35.4
Civilian salaries	18.8
Overhead	8.2
CHAMPUS	0
Other	(5.2)[b]
Total[a]	$ 57.1
Payback period (in years)	12
Personnel authorizations eliminated	
Officers	156
Enlisted	831
Civilians	499
Total	1,486

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.61: Naval Undersea Warfare Engineering Station

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	0
Personnel	.3
Homeowners Assistance Program	0
Other	0
Total[a]	$ .3
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	.8
Overhead	0
CHAMPUS	0
Other	0
Total[a]	$ .8
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	20
Total	20

[a]Total dollar amounts may not add due to rounding.

Table I.62: Naval Underwater Systems Center

	Amount (millions)
One-time costs	
New construction	$ 34.8
Moving	9.3
Personnel	3.7
Homeowners Assistance Program	0
Other	11.8
Total[a]	$ 59.5
One-time savings	
Construction avoidance	$ 12.6
Procurement avoidance	0
Land sales	0
Total[a]	$ 12.6
Recurring savings	
Mission	$ 0
Military salaries	.6
Civilian salaries	5.3
Overhead	1.4
CHAMPUS	0
Other	0
Total[a]	$ 7.3
Payback period (in years)	7
Personnel authorizations eliminated	
Officers	4
Enlisted	11
Civilians	128
Total	143

[a]Total dollar amounts may not add due to rounding.

Table I.63: Naval Weapons Center

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	0
Personnel	2.8
Homeowners Assistance Program	0
Other	5.9
Total[a]	$ 8.7
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	6.5
Overhead	0
CHAMPUS	0
Other	0
Total[a]	$ 6.5
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	158
Total	158

[a]Total dollar amounts may not add due to rounding.

Table I.64: Naval Weapons Evaluation Facility

	Amount (millions)
One-time costs	
New construction	$ 1.1
Moving	.1
Personnel	1.6
Homeowners Assistance Program	0
Other	1.6
Total[a]	$ 4.4
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	3.9
Civilian salaries	4.1
Overhead	.3
CHAMPUS	0
Other	0
Total[a]	$ 8.3
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	20
Enlisted	86
Civilians	100
Total	206

[a]Total dollar amounts may not add due to rounding.

Table I.65: Naval Weapons Support Center

	Amount (millions)
One-time costs	
New construction	$ 2.5
Moving	1.0
Personnel	.7
Homeowners Assistance Program	0
Other	0
Total[a]	$ 4.1
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	.7
Overhead	0
CHAMPUS	0
Other	0
Total[a]	$ .7
Payback period (in years)	8
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	16
Total	16

[a]Total dollar amounts may not add due to rounding.

Table I.66: Pacific Missile Test Center

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	0
Personnel	3.3
Homeowners Assistance Program	0
Other	5.9
Total[a]	$ 9.2
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	.7
Civilian salaries	7.9
Overhead	0
CHAMPUS	0
Other	0
Total[a]	$ 8.5
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	1
Enlisted	20
Civilians	190
Total	211

[a]Total dollar amounts may not add due to rounding.

Table I.67: Philadelphia Naval Shipyard

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	.7
Personnel	16.8
Homeowners Assistance Program	0
Other	112.3
Total[a]	$129.8
One-time savings	
Construction avoidance	$ 10.0
Procurement avoidance	0
Land sales	0
Total[a]	$ 10.0
Recurring savings	
Mission	$ 0
Military salaries	4.3
Civilian salaries	25.5
Overhead	6.2
CHAMPUS	0
Other	0
Total[a]	$ 36.0
Payback period (in years)	3
Personnel authorizations eliminated	
Officers	45
Enlisted	41
Civilians	615
Total	701

[a]Total dollar amounts may not add due to rounding.

Table I.68: Sand Point (Puget Sound) Naval Station

	Amount (millions)
One-time costs	
New construction	$ 23.6
Moving	.2
Personnel	1.5
Homeowners Assistance Program	0
Other	3.1
Total[a]	$ 28.4
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ (.8)[b]
Military salaries	0
Civilian salaries	0
Overhead	2.6
CHAMPUS	0
Other	(.2)[b]
Total[a]	$ 1.6
Payback period (in years)	100
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	0
Total	0

[a]Total dollar amounts may not add due to rounding.

[b]Indicates a negative savings, actually a cost.

Table I.69: Trident Command and Control Systems Maintenance Activity

	Amount (millions)
One-time costs	
New construction	$ 0
Moving	0
Personnel	.7
Homeowners Assistance Program	0
Other	0
Total[a]	$ .7
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	0
Land sales	0
Total[a]	$ 0
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	1.0
Overhead	0
CHAMPUS	0
Other	0
Total[a]	$ 1.0
Payback period (in years)	0
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	27
Total	27

[a]Total dollar amounts may not add due to rounding.

Table I.70: Tustin Marine Corps Air Station

	Amount (millions)
One-time costs	
New construction	$458.1
Moving	12.6
Personnel	1.3
Homeowners Assistance Program	0
Other	137.5
Total[a]	$609.4
One-time savings	
Construction avoidance	$ 0
Procurement avoidance	.2
Land sales	499.6
Total[a]	$499.8
Recurring savings	
Mission	$ 0
Military salaries	0
Civilian salaries	0
Overhead	29.6
CHAMPUS	0
Other	.2
Total[a]	$ 29.8
Payback period (in years)	10
Personnel authorizations eliminated	
Officers	0
Enlisted	0
Civilians	0
Total	0

[a]Total dollar amounts may not add due to rounding.

Table I.71: Whidbey Island Naval Air Station

	Amount (millions)
One-time costs	
New construction	$308.6
Moving	18.2
Personnel	8.9
Homeowners Assistance Program	98.1
Other	34.1
Total[a]	$468.1
One-time savings	
Construction avoidance	$ 39.1
Procurement avoidance	0
Land sales	0
Total[a]	$ 39.1
Recurring savings	
Mission	$ 0
Military salaries	34.5
Civilian salaries	21.6
Overhead	11.3
CHAMPUS	0
Other	1.7
Total[a]	$ 69.1
Payback period (in years)	9
Personnel authorizations eliminated	
Officers	85
Enlisted	968
Civilians	574
Total	1,627

[a]Total dollar amounts may not add due to rounding.

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