

Cost of Base Realignment Action (COBRA) Model

The Army Basing Study 2005

**30 September 2004
Audit Report: A-2004-0544-IMT**

**DELIBERATIVE DOCUMENT—
FOR DISCUSSION PURPOSES ONLY**
Do Not Release Under the Freedom of Information Act



U.S. Army Audit Agency





DEPARTMENT OF THE ARMY
U.S. ARMY AUDIT AGENCY
Office of the Deputy Auditor General
Acquisition and Logistics Audits
3101 Park Center Drive
Alexandria, VA 22302-1596

30 September 2004

Director, The Army Basing Study Group

This is the report on our audit of the Cost of Base Realignment Action (COBRA) model. We performed this audit as part of our overall audit of the 2005 Army Basing Study. We will include the results of this audit in a summary report at the end of the study.

Our conclusions are positive; thus we are making no recommendations and the report is not subject to the command-reply process that Army Regulation 36-2 prescribes. However, we have incorporated the official Army position on our conclusions in Annex C.

I appreciate the courtesies and cooperation extended to us during the audit.

FOR THE AUDITOR GENERAL:

A handwritten signature in black ink that reads "David H. Branham".

DAVID H. BRANHAM
Program Director
Installations Studies

For more information about this audit, please call the Installation Studies Division at (703) 681-6020. For extra copies of this report, please call (703) 681-9863.

DELIBERATIVE DOCUMENT – FOR DISCUSSION PURPOSES ONLY
Do Not Release Under the Freedom of Information Act

CONTENTS

	Page
Introduction	
What We Audited.....	5
Results in Brief.....	5
Background.....	6
Responsibilities.....	7
Objectives and Conclusions	
A – Calculation of Costs and Savings Estimates.....	11
Does the COBRA model calculate costs and savings estimates as prescribed in the operator’s manual?	
<i>Yes. The model calculates costs and savings estimates as prescribed in the operator’s manual.</i>	
B – Calculation of Net Present Value	15
Does the COBRA model accurately calculate net present value?	
<i>Yes. The model accurately calculates net present value.</i>	
C – Enhancements to the Model.....	19
Will planned enhancements to the COBRA model for the 2005 round of base realignments and closures improve procedures for calculating costs and savings?	
<i>Yes. The enhancements for the 2005 round should improve procedures for calculating costs</i>	

and savings. Enhancements included conversion to a Windows-based system, addition of four standard factors, an input screen for enclave costs, and development of a user's checklist. Previous audit recommendations related to the model were also addressed.

Annexes

A – Audit Scope and Methodology.....	27
B – Flowchart of the Army Basing Study Process	28
C – Official Army Position/Verbatim Comments by Command.....	29
D – Others Receiving Copies of This Report	30
E – Audit Team.....	31

INTRODUCTION

WHAT WE AUDITED

The COBRA model is a DOD standard computer model that serves as a consistent method for evaluating realignment and closure options. The model is designed to estimate the costs and savings associated with a proposed realignment or closure alternative. The model is intended to use data that is readily available to Military Departments and Defense agencies without extensive field studies. In accordance with Under Secretary of Defense Policy Memorandum One, dated 16 April 2003, DOD Components and the Joint Cross-Service Groups must use the COBRA model to calculate the costs, savings and return on investment of proposed realignment and closure actions.

The Army has been responsible for the continued development and modification of the model since 1991. During the 2005 round of base realignments and closures, the Army will continue as the executive agent for the model. Consequently, the Director, The Army Basing Study Group asked that we audit the 2005 COBRA model as part of our audit support of The Army Basing Study 2005.

RESULTS IN BRIEF

The 2005 version of the COBRA model calculates costs and savings as prescribed in the operator's manual. The model contains 340 algorithms (equations) related to costs and savings that are described in detail in the manual. We tested all 340 algorithms. Our results matched results from the model.

The 2005 model accurately calculates net present value. The algorithm in the model is the standard net present value formula from Office of Management and Budget Circular A-94 (Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs) applying the discount rate at the midyear point. We tested this algorithm using multiple stationing actions and various discount rates. Our results matched the results from the model.

Planned enhancements for the 2005 model should improve procedures for calculating costs and savings. In addition to changing operating systems, the model included other enhancements:

- Additional standard factors for locality pay, storage costs, information technology costs, and facility codes.
- An input screen for enclave costs.
- New documentation for users.

The additional standard factors enable the model to more precisely calculate costs and savings for each stationing action than previous versions. In addition, actions taken by the DOD Infrastructure Steering Group and the Joint Process Action Team for the 2005 model adequately addressed previous recommendations related to military personnel costs and savings, civilian salary savings and recurring costs. (See Audit Report: AA 97-225, 31 July 1997, Base Realignment and Closure 1995 Savings Estimates.)

BACKGROUND

The U.S. Air Force Cost Center, in conjunction with the Logistics Management Institute, originally developed the COBRA model during early 1988 to evaluate the cost of Air Force stationing actions. The initial version of the model used Lotus Spreadsheet software. The 1988 Base Realignment and Closure (BRAC) Commission adopted this version of the model and revised it to calculate, evaluate and compare the relative costs of stationing alternatives during the 1988 process. At the start of the 1991 BRAC process, the Army became the responsible party for the continued development and modification of the model. When the 2005 BRAC process began, the Army continued its role as the executive agent for the model.

COBRA is an economic analysis model. It estimates the costs and savings associated with a proposed BRAC action using data available to all analysts and users for the BRAC 2005 process. The model output can be used to compare the relative cost benefits of alternative realignment and closure actions. The model isn't designed to produce budget estimates, but to provide a consistent and auditable method of evaluating and comparing different courses of action in terms of the resulting economic impacts for those costs and savings measured in the model.

The Secretary of Defense initiated BRAC 2005 on 15 November 2002. The Secretary of the Army established the Deputy Assistant Secretary of the Army (Infrastructure Analysis) to lead the Army's efforts to support

BRAC 2005. The Deputy Assistant Secretary directs The Army Basing Study Group, an ad hoc, chartered organization that serves as the Army's single point of contact for planning and executing the Army's responsibilities in the development of recommendations for BRAC 2005. The Study Group will:

- Assess the capacity and military value of Army installations.
- Evaluate BRAC alternatives.
- Develop recommendations for BRAC 2005 on behalf of The Secretary of the Army.

To accomplish this, the Study Group will obtain and analyze certified data from Army installations; industrial base sites and leased properties; Army corporate databases; and open source data. A flowchart of the 2005 Army basing study process is at Annex B on page 28. In accordance with Under Secretary of Defense Memorandum Policy One, the Study Group will use the COBRA model to determine the costs and savings associated with realignment and closure actions developed during the 2005 process.

RESPONSIBILITIES

The Office of the Assistant Secretary of the Army (Installations and Environment) has responsibility for policy development, program oversight and coordination of Army activities related to Army installations; privatization of the Army infrastructure; environmental programs; and safety and occupational health programs.

The Deputy Assistant Secretary of the Army for Infrastructure Analysis, who is under the Assistant Secretary of the Army (Installations and Environment), oversees The Army Basing Study Group. The Study Group is responsible for:

- Examining the issues surrounding the realignment and closure of Army installations within the 50 States, the District of Columbia, and U.S. Commonwealths, territories and possessions.
- Making recommendations to The Secretary of the Army and Chief of Staff, Army concerning potential realignments and closures.

- Serving as the Army's single point of contact for BRAC 2005.
- Fulfilling the Army's role as executive agent for the COBRA model during the 2005 BRAC process.

A Joint Process Action Team, consisting of members from all the Services, the Office of the Secretary of Defense and Defense agencies, is responsible for identifying, discussing and approving enhancements to the model.

OBJECTIVES AND CONCLUSIONS

A – CALCULATION OF COSTS AND SAVINGS ESTIMATES

OBJECTIVE

Does the COBRA model calculate costs and savings estimates as prescribed in the operator's manual?

CONCLUSION

Yes. The 2005 COBRA model calculates costs and savings estimates as prescribed in the updated draft operator's manual.

Our review and tests of the model's 340 algorithms from the May 2004 draft operator's manual showed that:

- One algorithm (civilian salary costs) in the 2005 model didn't calculate costs and savings as described in the draft operator's manual. The model didn't include the costs associated with civilian realignments and thus understated personnel costs.
- The draft operator's manual contained 66 errors in the descriptions of the algorithms.

These problems were corrected and the draft operator's manual was updated. Consequently, the model calculates costs and savings as described in the most recent manual and should provide a consistent method of comparing and evaluating stationing actions.

Our detailed discussion of these conditions starts on page 13. We are making no recommendations.

BACKGROUND

The 2005 COBRA model and the draft operator's manual (May 2004 version) for the model contained 340 algorithms, which were grouped into 7 categories such as military construction, mission and personnel.

Here's an example of one of the model's algorithms (civilian house hunting cost—moving) as described in the May 2004 draft operator's manual:

The *Civilian House Hunting Cost* for an installation is the Total Civilian Personnel Moved at least 50 miles times the sum of the House Hunting Travel Cost and the House Hunting Per Diem Cost. The *House Hunting Travel Cost* is the distance between bases times the Air Transportation Per Passenger Mile times four (algorithm assumes two people taking two trips). The *House Hunting Per Diem Cost* is the gaining base's Civilian Per Diem Rate times 1.75 times 10 (algorithm assumes ten days spent looking). Here are the 3 equations that make up the algorithm:

- House Hunt = (Civilians Moved = 50 Miles) * (Travel + Per Diem)
- Travel = Distance * (Air Transport) * 4
- Per Diem = Civilian Per Diem Rate * 17.5

Once all Services and Defense agencies have provided data for the model to The Army Basing Study Office, the operator's manual will be finalized and published (this should occur in October 2004).

DISCUSSION

In this section we discuss one area:

Testing of Algorithms

We entered all 340 algorithms from the operator's manual into a spreadsheet software program. We obtained data for four different notional installations (fictional installations based on composites of actual data that The Army Basing Study Office collected for the 2005 BRAC process). We entered the data for the notional installations into a spreadsheet software program and calculated costs and savings for four stationing actions. We also entered the same notional installations and data into the 2005 COBRA model, produced reports for each stationing action, and compared them with the results from the spreadsheet software program.

Only one algorithm (civilian salary costs) in the 2005 model didn't calculate costs and savings as described in the May 2004 draft operator's manual. The model didn't include the costs associated with civilian realignments and therefore understated personnel costs. We also found that the draft operator's manual had 66 errors in the descriptions of the algorithms. For example, the algorithm for actual base operations support (overhead category) appeared in the manual as follows:

$$\text{start base operations support} + \left(\frac{\text{start base operations support}}{\text{start population} + \text{unit cost adjustment}} \right) * \text{total program installation population changes}$$

The algorithm for actual base operations support should have appeared in the manual as follows:

$$\text{start base operations support} + \left(\frac{\text{start base operations support}}{\text{start population} + \text{unit cost adjustment}} \right) * (\text{current program installation population} + \text{previous years program installation population changes})$$

We notified responsible personnel in The Army Basing Study Group of the problems we identified, and they worked with the model's contractor to update the model and manual. After we were notified that the updates occurred, we:

- Processed the four stationing actions again in the updated 2005 model and in the spreadsheet software program. The model and spreadsheet results matched for all 340 algorithms.
- Verified that the updated draft operator's manual (July 2004 version) accurately described the 66 algorithms that were previously in error.

We concluded that the updated 2005 model calculates costs and savings estimates as prescribed in the most recent operator's manual. Consequently, it should provide a consistent method of comparing and evaluating stationing actions.

B – CALCULATION OF NET PRESENT VALUE

OBJECTIVE

Does the COBRA model accurately calculate net present value?

CONCLUSION

Yes. The 2005 COBRA model accurately calculates net present value. We verified that the model's algorithm is the standard net present value formula from Office of Management and Budget Circular A-94 with the application of the discount rate at the midyear point. Also, the 20-year real discount rate of 3.15 percent, which will be used in the 2005 BRAC process, was derived in accordance with the Office of Management and Budget guidance. Additionally, our tests of the model's application of the net present value algorithm showed that the model accurately makes the calculations.

Our detailed discussion of these conditions starts on page 16. We are making no recommendations.

BACKGROUND

Office Management of Budget Circular A-94, dated October 1992, provides general guidance for conducting benefit-cost and cost-effectiveness analysis. According to the circular, the standard criterion for deciding whether a government program can be justified on economic principles is net present value—the discounted monetized value of expected net benefits. The circular further defines net present value as the difference between the discounted present value of benefits and the discounted present value of costs. It defines net present value mathematically as:

Present value of a single amount = $1 / (1 + k)^n$ where

k = annual rate of interest, and

n = number of periods—typically yearly—over which money earns a return.

The 2005 COBRA model calculates realignment costs by applying the net present value formula. The algorithm in the model appears as:

$$\frac{\text{total realignment net cost}}{(1 + \text{net present value discount})^{\text{Year}-1/2}}$$

DISCUSSION

In this section we discuss two areas:

- Net present value algorithm.
- Calculation tests.

Net Present Value Algorithm

The algorithm used in the 2005 COBRA model to calculate net present value is correct. It's the standard formula from Office of Management and Budget Circular A-94:

$$\frac{\text{total realignment net cost}}{(1 + \text{net present value discount})^{\text{Year}-1/2}}$$

However, the formula in the model contained a midyear discount factor. The Joint Process Action Team, which consists of members from DOD and each of the three Services, met weekly to discuss the development of the 2005 model. At an October 2003 meeting, the team decided that a midyear discount factor would be applied to the formula. We agreed with this decision because Office of Management and Budget Circular A-94 states that when costs or benefits occur in a steady stream, applying a midyear discount factor is more appropriate.

Also, the total realignment costs are calculated in the model, and the discount rate is based on the 20-year lifespan of the overall BRAC process. Appendix C of Circular A-94 provides the 10-year and 30-year real discount rates. Appendix C (February 2004 annual revision) advises that a linear interpolation can be used to determine a real discount rate for the 20-year period. Accordingly, the real discount rate of 3.15 percent used in the model was appropriately derived in accordance with the circular as follows:

$$(2.8\% \text{ \{10-year rate\}} + 3.5\% \text{ \{30-year rate\}}) / 2 = 3.15\%$$

Calculation Tests

The algorithm in the 2005 COBRA model calculates net present value accurately. We conducted 14 different tests using 4 different stationing actions (scenarios involving the same notional installations as discussed in Objective A):

- Four tests using the real discount rate of 3.15 percent for four different stationing actions.
- Ten tests using ten randomly selected discount rates between 1 percent and 20 percent for a single stationing action.

We produced a net present value report from the model for each of our 14 tests.

We also entered the constant dollar costs from each of the 14 net present value reports into a spreadsheet software program. We applied the Office of Management and Budget's net present value formula to each of the 14 constant dollar values and the applicable discount rate. We compared the spreadsheet results with the net present value totals in the model reports. Our results showed that the present value totals were the same (some small differences—less than \$1—occurred that we attributed to rounding). Here are the comparison results:

Stationing Action	Discount Rate	Audit	COBRA	Difference
1	3.15	(\$30,817,049)	(\$30,817,050)	\$1
2	3.15	(14,536,584)	-14,536,584	0
3	3.15	673,527,317	673,527,317	0
4	3.15	471,138,529	471,138,529	0
1	15.16	(29,165,864)	(29,165,864)	0
1	12.52	(29,506,032)	(29,506,032)	0
1	9.10	(29,964,932)	(29,964,932)	0
1	14.47	(29,253,635)	(29,253,634)	1
1	19.89	(28,584,737)	(28,584,736)	1
1	1.44	(31,075,710)	(31,075,709)	1
1	1.12	(31,124,841)	(31,124,841)	0
1	10.71	(29,746,252)	(29,746,252)	0
1	9.39	(29,925,186)	(29,925,186)	0
1	19.10	(28,679,382)	(28,679,382)	0

Thus we concluded that the algorithm in the 2005 COBRA model accurately calculates net present value.

C – ENHANCEMENTS TO THE MODEL

OBJECTIVE

Will planned enhancements to the COBRA model for the 2005 round of base realignments and closures improve procedures for calculating costs and savings?

CONCLUSION

Yes. Planned enhancements to the model for the 2005 round will improve procedures for calculating costs and savings. Our review showed that actions were taken to:

- Convert from a disk operating system-based model to a Windows-based system model. This improvement enhances the functionality of the model with respect to memory utilization, ease of user interface, and ease of printing output reports.
- Form a Joint Process Action Team, consisting of members from DOD and each of the three Services, to identify enhancements for the model. Enhancements included adding standard factors for locality pay for civilians, average cost of storage in transit, information technology, and rehabilitation; an input screen for enclave costs; and a user's checklist.

In addition, actions taken by DOD's Infrastructure Steering Group and the Joint Process Action Team addressed audit recommendations regarding military personnel costs and savings, civilian salary savings, and recurring costs we previously made. As a result, procedures for calculating costs and savings should improve.

Our detailed discussion of these conditions starts on page 20. We are making no recommendations.

BACKGROUND

For BRAC 1995, the U.S. Government Accountability Office issued a report in which it concluded that the 1995 version of the COBRA model overcame weaknesses reported by the office and other entities during the 1993 BRAC round.

During 1997 we issued a recommendation to the Assistant Chief of Staff for Installation Management that was related to payback periods in the Cost of Base Realignment Action model. (See Audit Report: AA 97-225, Base Realignment and Closure 1995 Savings Estimates.)

As a result of the new BRAC round in 2005, The Army Basing Study Office, as the executive agent for the model, was responsible for improving the base realignment model through the Joint Process Action Team. The team consisted of representatives from the Office of the Secretary of Defense and all Military Services. The team met weekly between August and November 2003 to identify, discuss and approve enhancements for the model.

DISCUSSION

In this section we discuss two areas:

- Model enhancements.
- Prior audit report.

Model Enhancements

Planned enhancements to the COBRA model for the 2005 round of base realignments and closures will improve procedures for calculating costs and savings. Actions were taken to convert the 1995 model from a disk operating system-based model to a Windows-based model during the 2000 Quadrennial Decision Review. This change improved model functionality with respect to:

- Memory utilization.

- Ease of user interface.
- Ease of printing output reports.

The Joint Process Action Team for the model also implemented enhancements for the 2005 model. The team added standard factors for:

- **Average Civilian Pay.** In the 1995 model, an average for civilian pay was used for all installations regardless of location. To more precisely estimate civilian salary costs, the 2005 model will apply locality rates to average civilian salaries.
- **Average Cost of Storage in Transit.** The average cost of storage in transit for a personnel change of station move wasn't captured in the 1995 model. Addition of this standard factor to the 2005 model will more precisely estimate costs associated with personnel change of station moves.
- **Information Technology.** The 1995 model didn't consider information technology costs. A standard factor for information technology costs will be added to the 2005 model that will more precisely estimate costs associated with connecting/disconnecting computers.
- **Rehabilitation Factor.** In the 1995 model, the rehabilitation factor was the same for all buildings regardless of condition. In the 2005 model, the condition of the building will be given consideration. A "red" code indicates all infrastructure requires rehabilitation; an "amber" code indicates some of the infrastructure needs rehabilitation. Based on the code, different percentages are applied to facility replacement costs to estimate rehabilitation costs. If an analyst doesn't enter the condition code for a building, the model uses an average of the "red" and "amber" factors. This enhancement will provide a more realistic estimate of rehabilitation costs for buildings.

The 1995 model didn't capture costs associated with building enclaves, including sustainment costs, personnel costs, and base operating support costs. A separate screen to enter these costs was added to the 2005 model to more precisely capture costs associated with building and sustaining enclaves.

In the 1995 model, analysts didn't have a user checklist to ensure that all costs and conditions related to scenarios were included. The Joint Process Action Team added a template/checklist for the 2005 model to

help ensure that users review and include all costs and conditions in proposed scenarios before entering them into the 2005 model.

As a result of these changes, the 2005 COBRA model will provide more flexibility in its utilization and will more precisely estimate costs and savings associated with proposed realignments and base closures.

Prior Audit Report

Our prior audit report (AA 97-225, 31 July 1997) concluded that the payback period for the 1995 base realignments or closures would be significantly longer than the BRAC Commission's estimate. We based the conclusion on a review of 10 sites that were affected by the decisions from BRAC 1995. The audit concluded that the model:

- Included military personnel costs and savings even though DA classified them as force structure reductions.
- Used a DOD/Army average civilian salary to compute civilian savings. The average salaries of the realigning or closing sites was often much lower.
- Didn't include annual recurring costs to operate four Reserve Component enclaves.

Consequently, payback periods were longer than estimated. Our report contained a recommendation addressed to the Assistant Chief of Staff for Installation Management related to the COBRA model. It recommended that for future base closure rounds, the Assistant Chief of Staff develop procedures to ensure that the model includes:

- Only reimbursable amounts that will result in savings.
- Civilian salary savings based on the average salaries of affected installations.
- All recurring costs (including those for enclaves and activities remaining on installations).

In 1997, the Office of the Assistant Chief of Staff agreed and said it would:

- Make the audit report available to future basing study teams.

- Recommend that the COBRA model be modified regarding civilian salaries.
- Make necessary changes to permit an evaluation of reimbursable savings.

Although the office had no record of implementing the recommended actions, we found that actions taken by DOD's Infrastructure Steering Group and the Joint Process Action Team adequately addressed them.

Military Personnel Costs and Savings

The Infrastructure Steering Group, one of two senior groups the Secretary of Defense established to oversee and operate the BRAC 2005 process, decided to include military personnel costs as base realignment savings. The Steering Group is chaired by the Under Secretary of Defense (Acquisition, Technology and Logistics), and its members include the:

- Vice Chairman of the Joint Chiefs of Staff.
- Military Department Assistant Secretaries for Installations and Environment.
- Service Vice Chiefs of Staff.
- Deputy Under Secretary of Defense (Installations and Environment).

In December 2003 the Steering Group requested information papers on five issues, including whether military personnel costs should be considered as base realignment savings in model calculations. The Joint Process Action Team prepared an information paper recommending that the model calculate military personnel savings. This approach:

- Preserves the accuracy, visibility and auditability of base realignment actions.
- Reinforces the planning, programming, budgeting and execution process that reallocates resulting resources saved through base realignment decisions.
- Maintains consistency with all other categories of savings.

In January 2004 the Steering Group approved the recommendation. Although our recommendation wasn't implemented as described in the prior audit report, these actions adequately satisfied the intent of our recommendation.

Locality Pay

As previously discussed, the model will apply a locality pay to the standard factor for average civilian salary based on the location of installations. During the audit we determined that average civilian salary by installation wasn't available for all Defense locations. Thus the action taken by the Joint Process Team satisfies the intent of our prior recommendation.

Recurring Costs

As we discussed earlier, one of the new model features includes costs associated with building enclaves, such as sustainment, personnel and base operating support costs. The model now allows input of recurring costs related to enclaves (Screen 8 in the model). This change also meets the intent of our recommendation.

ANNEXES

AUDIT SCOPE AND METHODOLOGY

We performed the audit:

- From July 2003 to September 2004.
- In accordance with generally accepted government auditing standards.

We conducted the audit at The Army Basing Study Office with the assistance of the model's contractor and Study Group personnel. We interviewed these personnel during the audit and also:

- Obtained and reviewed prior audit reports related to the COBRA model.
- Obtained the 1995 and 2005 versions of the COBRA model.
- Obtained and reviewed the 1995 and 2005 versions of the operator's manual.
- Attended 1995 and 2005 COBRA model training.
- Attended all COBRA model Joint Process Action Team meetings held from August through November 2003.

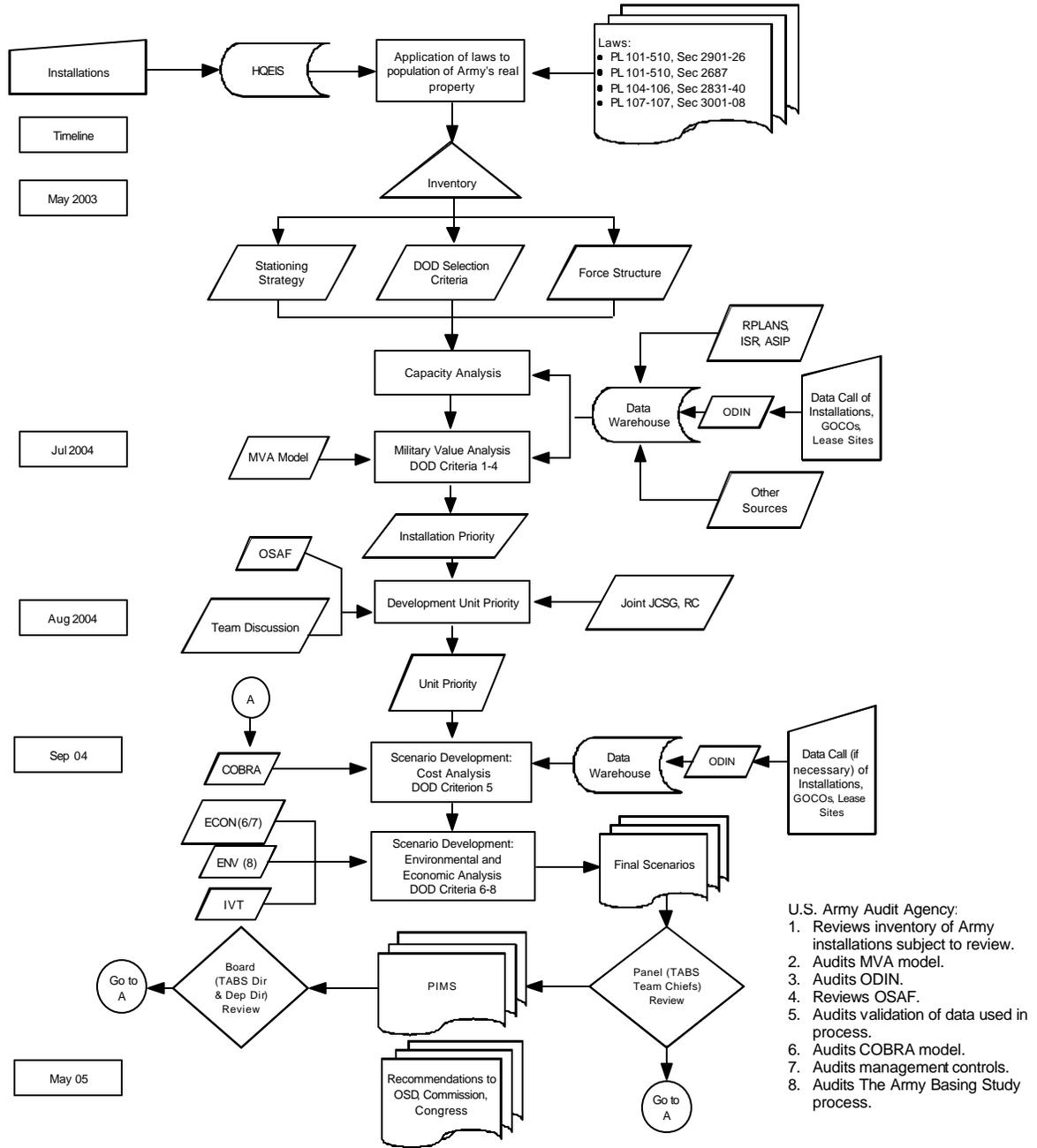
To determine if the COBRA model calculates costs and savings estimates as prescribed in the operator's manual, we tested the model's 340 algorithms using a spreadsheet software program and the 2005 model and comparing the results.

To determine if the model accurately calculated net present value, we:

- Obtained and reviewed applicable Office of Management Budget guidance related to net present value.
- Performed 14 different tests using various stationing actions and discount rates with the 2005 model and the spreadsheet software program.

To determine if planned enhancements to the COBRA model for the 2005 round of base realignments and closures improve procedures for estimating costs and savings, we identified all enhancements made to the 1995 COBRA model that resulted in the 2005 model and determined if they would improve procedures for calculating costs and savings.

FLOWCHART OF THE ARMY BASING STUDY PROCESS



Acronyms and Abbreviations Used:

ASIP = Army Stationing and Installation Plan	ISR = Installation Status Report	OSAF = Optimal Stationing of Army Forces
COBRA = Cost of Base Realignment Action Model	IVT = Installation Visualization Tool	OSD = Office of the Secretary of Defense
ECON = Economic Model	JCSG = Joint Cross-Service Group	PIMS = Proposal Information Management System
ENV = Environmental Model	MVA = Military Value Analyzer Model	RC = Reserve Components
GOCO = Government-Owned, Contractor-Operated	ODEM = Option Determination and Evaluation Module	RPLANS = Real Property Planning and Analysis System
HQEIS = Headquarters Executive Information System	ODIN = Online Data Interface Collection	TABS = The Army Basing Study Group

**OFFICIAL ARMY POSITION/VERBATIM
COMMENTS BY COMMAND**



DEPARTMENT OF THE ARMY
ASSISTANT SECRETARY OF THE ARMY
INSTALLATIONS AND ENVIRONMENT
110 ARMY PENTAGON
WASHINGTON DC 20310-0110

SAIE(IA)

September 28, 2004

MEMORANDUM FOR Office of the Deputy Auditor General, Acquisitions and Logistics
Audits, 3101 Park Center Drive, Alexandria, VA 22302-1596

SUBJECT: Draft Audit of the Cost of Base Realignment Action (COBRA) Model

1. Reference: Audit Report A-2004-XXX-IMT, Cost of Base Realignment Action (COBRA) Model, The Army Basing Study 2005, September 2005.
2. We concur with the audit report in its entirety and consider the report to be accurate and factual.
3. POC for COBRA is MAJ David A. Smith. He can be reached at david.a.smith@us.army.mil, or by telephone (703) 696-9778, DSN 426-9778.

Craig E. College
Deputy Assistant Secretary of the Army
(Infrastructure Analysis)



OTHERS RECEIVING COPIES OF THIS REPORT

Assistant Secretary of the Army (Installations and Environment)
Department of Defense Inspector General
U.S. Government Accountability Office
Auditor General, Air Force Audit Agency
Auditor General, Naval Audit Service

AUDIT TEAM
(Project Code A-2003-IMT-0440.040)

Aberdeen Field Office

Donna Horvath

Fort Belvoir Field Office

Andrea Beck
Lawrence Wickens

Fort Meade Field Office

Richard Gladhill
Clarence Johnson

Operations Center

Kathleen Anshant