



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

DCN 9407

SAAG-IMT

24 August 2004

MEMORANDUM FOR The Director, The Army Basing Study

SUBJECT: Validation of Army Installation Capacity Data for Base Realignment and Closure 2005, Industrial Joint Cross-Service Group (Project Code A-2003-IMT-0440.043), Audit Report: A-2004-0459-IMT

1. You asked us to validate Army installations' responses to the capacity data call that The Army Basing Study Group and six Joint Cross-Service Groups¹ will use for Base Realignment and Closure (BRAC) 2005 analyses. This is our report on the validation of Army capacity data call responses to questions the Industrial Joint Cross-Service Group was interested in.
2. Generally, Army installations' certified responses to capacity data call questions in the samples we validated were adequately supported with appropriate evidentiary matter and were accurate based on the criteria we applied. However, in some instances Army installations could not support their responses to the questions and did not accurately answer all questions. Details of our validation are in enclosure 1. The scope of our validation for the Industrial Joint Cross-Service Group capacity questions is in enclosure 2. A flowchart of the 2005 Army basing study process is in enclosure 3.
3. We discussed these results with key personnel at the Army installations. They took corrective actions for the problems we identified and submitted certified changes to the Study Group for answers we identified as requiring correction. We also discussed these results with the Army representatives on the Industrial Joint Cross-Service Group. Consequently, this report does not contain any recommendations and is not subject to the official command-reply process described in AR 36-2.
4. We appreciate the courtesies and cooperation extended to us during the validation. If you have any questions or need additional information,

¹ The Study Group did not collect capacity data for a seventh group—the Intelligence Joint Cross-Service Group. Accordingly, we will report data validation results for that group to the Deputy Chief of Staff, G-2.

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FOR THE AUDITOR GENERAL:



DAVID H. BRANHAM
Program Director
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3 Encls

CF:

Office of the Inspector General, DOD
Army Representatives, Industrial Joint Cross-Service Group
(Ms. Willie Smith, Mr. Gary Motsek)

**VALIDATION OF ARMY INSTALLATION CAPACITY DATA FOR
BASE REALIGNMENT AND CLOSURE 2005
INDUSTRIAL JOINT CROSS-SERVICE GROUP**

WHAT WE VALIDATED

You asked that we validate Army installations' responses to the capacity data call that The Army Basing Study Group and six Joint Cross-Service Groups will use for Base Realignment and Closure 2005 analyses. Our validation efforts focused on determining if responses were adequately supported and accurate. This enclosure summarizes the results of our validation efforts for the Army capacity data that the Study Group collected, certified and provided to the Industrial Joint Cross-Service Group. We will include these results in our overall summary reports on the capacity data call and the 2005 Army basing study process.

BACKGROUND

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 BRAC 2005 recommendations. The Study Group will gather and analyze certified data to assess the capacity and military value of Army installations, evaluate base realignment and closure alternatives, and develop recommendations for BRAC 2005 on behalf of The Secretary of the Army. The BRAC 2005 process requires certification of all data from Army installations, industrial base sites and leased properties; Army corporate databases; and open sources. A flowchart of the 2005 Army basing study process is at enclosure 3.

Enclosure 1

SCOPE AND METHODOLOGY

The Army's inventory included 88 installations that met the BRAC 2005 threshold for study. For the capacity data call, the Study Group sent each installation a total of 552 questions: 548 questions to answer, if applicable, and 4 questions pre-populated from Army databases. During our validation efforts, we visited 31 installations and validated responses to a sample of 45 questions the Industrial Joint Cross-Service Group was interested in: 8 that we judgmentally selected for validation at each installation we visited, plus a random selection of the remaining questions. (The number of capacity questions answered and the number of responses we validated at each installation are in enclosure 2.) We tested 173 of 450 total responses for adequacy of support and 160 responses for accuracy. We also reviewed all 945 responses to questions the Industrial Joint Group was interested in that Army installations answered as "not applicable" to determine if that answer was appropriate. We did not validate answers to the 133 Industrial Group questions included in the supplemental capacity data call issued on 9 July 2004.

We conducted our validation from April to August 2004 in accordance with generally accepted government auditing standards, which include criteria on the adequacy and appropriateness of evidentiary matter, accuracy and management controls. We assessed the accuracy of installation answers using these specific criteria:

- For questions with a single answer and minimal support requirements, we did not allow any margin for error except for answers reporting square footage.
- For questions with answers involving square footage, we defined significant errors as greater than 10 percent.
- For questions with multiple answers and single answers with voluminous supporting documentation, we allowed errors up to 25 percent in the samples we reviewed, provided the errors were not significant (determined by auditor judgment except for answers reporting square footage).

We did not rely on computer-generated data to validate responses from Army corporate databases, but instead validated the accuracy of the data by comparison with installation source documents or physical attributes. When practicable, we also validated installation responses from other

databases in the same manner. For all other responses, we worked with the installation administrators to obtain the evidence needed to answer our objectives.

We also evaluated installation compliance with the Study Group's Internal Control Plan, but we will address those results in our overall reports on the capacity data call and the 2005 Army basing study process.

OBJECTIVE AND CONCLUSION

We established one objective for our validation of Industrial Joint Cross-Service Group capacity data. Here is that objective and our conclusion.

Objective: To determine if Army installations' certified responses to capacity data call questions in which the Industrial Group had an interest were adequately supported with appropriate evidentiary matter and were accurate.

Conclusion: Generally, Army installations' certified responses to capacity data call questions the Industrial Group was interested in were adequately supported with appropriate evidentiary matter and were accurate, based on the criteria we applied to responses in our samples. In addition, we concluded that the "not applicable" responses were appropriate. However, we found some instances where Army installations could not support their responses to capacity questions and did not answer all questions accurately. We discussed the potential risk of using inaccurate or inconsistent data in the Industrial Group's analyses with the group's members. The members responded that the Industrial Group acted to mitigate the potential risk.

Adequate Support. Of the 173 responses we validated for adequacy of support, 152 responses were adequately supported with appropriate evidentiary matter. In most cases the 21 other responses were not adequately supported because:

- Army installations submitted answers that differed from the supporting evidence.

- Functional responders did not save the original documents they used to answer the questions or the documents were incomplete.

We noted that responses to 2 questions frequently were not adequately supported (at more than 3 of the 31 installations): facilities currently under construction (no. 22) and intermediate-level maintenance workload that was contracted outside the installations' organization (no. 499). The Army installations we visited satisfactorily corrected most of the problems we identified with supporting documentation.

Accuracy. Of the 160 responses we validated for accuracy, 115 responses were accurate. Answers were not accurate for the remaining 45 questions primarily because Army installations inappropriately included or excluded facilities in square footage compilations, used undocumented estimating methods that could not be used to replicate certified answers, and made mathematical errors. Responses to 5 questions frequently were inaccurate (at more than 3 of the 31 installations):

- Facility square footage (no. 11).
- Facilities currently under construction (no. 22).
- Facility square footage for installation maintenance ground vehicles commodity group (no. 486).
- Facility square footage for installations maintenance ground vehicles components commodity group (no. 487).
- Intermediate-level maintenance workload that was contracted outside the installations' organization (no. 499).

The Army installations we visited corrected the answers that were not accurate, recertified them, and resubmitted the responses to the Study Group. The Study Group, in turn, provided the corrected and recertified responses to the Industrial Group.

Potentially Misinterpreted. We also determined that Army installations may not have consistently interpreted and answered two questions (nos. 486 and 499) in accordance with the question amplification and clarification guidance. As discussed in the preceding paragraphs, responses to question nos. 486 and 499 frequently were not supported or accurate, or both. Consequently, we concluded that

the Industrial Group had reduced assurance that responses from all Army installations that answered question nos. 486 and 499 were consistent and reliable.

Potential Risk: In our opinion, the Industrial Group would have assumed a higher degree of risk if it used in its analyses Army responses that were frequently inaccurate, or responses to questions that Army installations did not consistently answer. We discussed the potential risk with members of the Industrial Group to determine what—if any—actions the group needed to take for the five questions we identified with systemic data problems. The members responded that the Industrial Group:

- Requested clarification from specific installations for question no 499.
- Will not use data in response to question nos. 486 and 487. The group concluded that the responses were inconsistent and asked new questions in the supplemental capacity data call issued on 9 July 2004.
- Will not use data in response to question nos. 11 and 22. Although the Army representatives initially expressed a need for data from these questions before the capacity data call, the group members said the data would not be used in the Industrial Group's analyses.

Also, the group requested data clarification for additional questions from Army installations and issued replacement questions in the supplemental capacity data call for other questions with inconsistent data.

In our opinion, these actions acknowledged the potential risk and should help mitigate the risk of using inaccurate or inconsistent data responses in the Industrial Group's analyses.

**SCOPE OF VALIDATION FOR INDUSTRIAL
JOINT CROSS-SERVICE GROUP CAPACITY QUESTIONS**

Installation/Activity	Industrial Facilities*	Total Questions Answered	Judgmental Sample	Random Sample	Total Responses Validated**
Aberdeen Proving Ground		6	2	1	3
Anniston Army Depot	X	18	4	3	7
Blue Grass Army Depot		18	4	1	5
Corpus Christi Army Depot	X	13	3	5	8
Detroit Arsenal		2	2	0	2
Fort Belvoir		23	6	2	8
Fort Benning		20	6	2	8
Fort Bliss		18	6	1	7
Fort Bragg		20	6	2	8
Fort Campbell		18	5	3	8
Fort Drum		21	6	1	7
Fort Eustis		19	6	1	7
Fort Gordon		3	2	0	2
Fort Hood		17	5	1	6
Fort Huachuca		11	3	1	4
Fort Lee		14	6	0	6
Fort Lewis		21	5	1	6
Fort McCoy		16	6	0	6
Fort Rucker		26	5	4	9
Fort Sam Houston		15	5	1	6
Fort Shafter		6	5	0	5
Fort Stewart/Hunter Army Airfield		24	6	1	7
Lima Army Tank Plant	X	7	2	1	3
McAlester Army Ammunition Plant	X	11	2	0	2
Picatinny Arsenal		9	4	0	4
Radford Army Ammunition Plant	X	4	1	1	2
Red River Army Depot	X	18	3	3	6
Redstone Arsenal	X	18	5	0	5
Schofield Barracks		17	6	2	8
Tobyhanna Army Depot	X	15	4	2	6
Tripler Army Medical Center		2	2	0	2
Totals		450	133	40	173

* "X" represent installations that the Army representative identified as having industrial facilities.

** Responses to all questions selected judgmentally were validated for accuracy and adequacy of evidentiary matter. Responses to all questions selected randomly were validated for adequacy of support. When time permitted, we also validated the responses for accuracy.

Enclosure 2

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

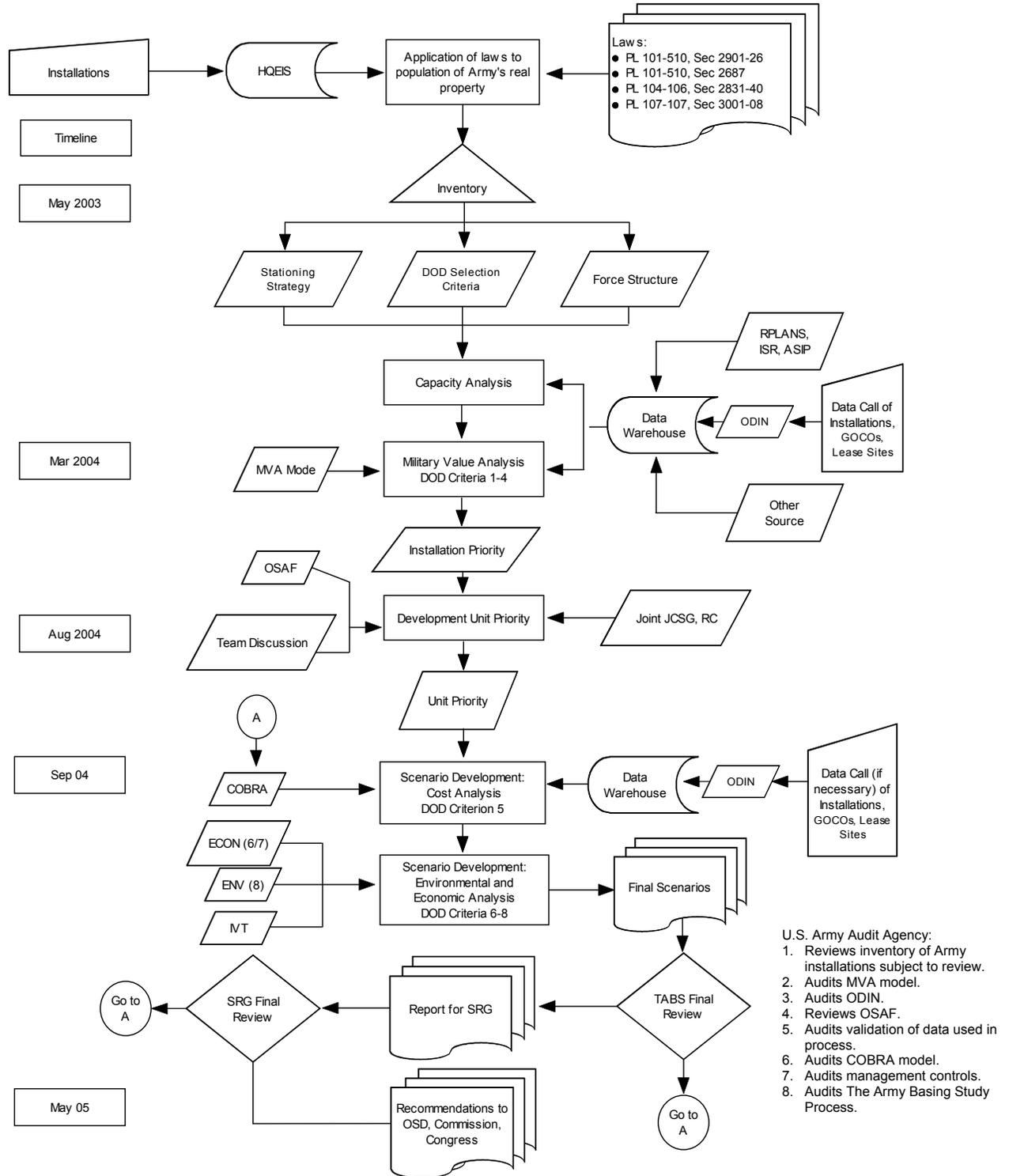
Acronyms and Abbreviations Used:

ASIP = Army Stationing and Installation Plan
 COBRA = Cost of Base Realignment Action Model
 ECON = Economic Model
 ENV = Environmental Model
 GOCO = Government-Owned, Contractor-Operated
 HQEIS = Headquarters Executive Information System

ISR = Installation Status Report
 IVT = Installation Visualization Tool
 JCSG = Joint Cross-Service Group
 MVA = Military Value Analyzer Model
 ODIN = Online Data Interface Collection
 OSAF = Optimal Stationing of Army Forces

OSD = Office of the Secretary of Defense
 PL = Public Law
 RC = Reserve Components
 RPLANS = Real Property Planning and Analysis System
 SRG = Senior Review Group

FLOWCHART OF 2005 ARMY BASING STUDY PROCESS



Enclosure 3